CURRENT NOTES

Vol. 11, No. 1 January/February 1991

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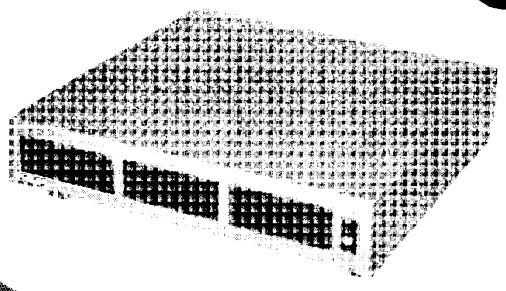

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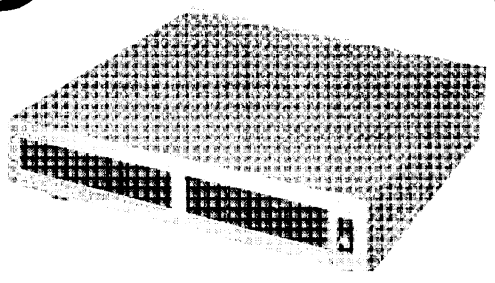

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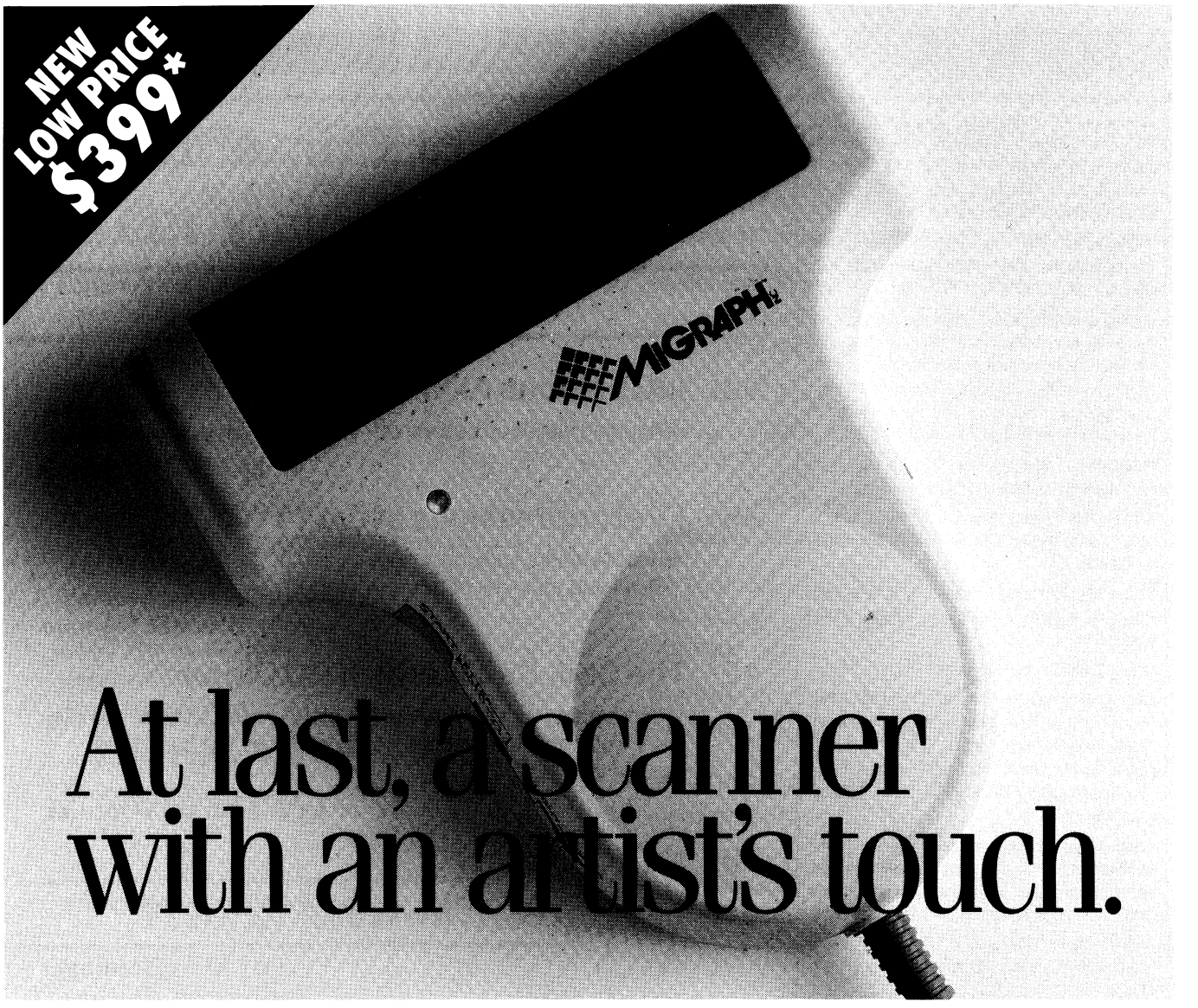

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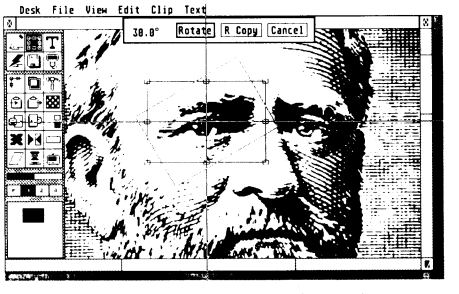

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This publication is produced using an Atari Mega ST4, an Atari SM124 monochrome monitor and a Moniterm Viking monitor, a Navarone scanner, and the Atari SLM804 Laser Printer. Most of the output is generated with *Publisher ST.* Some pages, including advertisements, are produced with *PageStream* and others with *Calamus.*

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MOVING???

Don't forget to send in a change of address notice if you are moving. *Current Notes* is distributed via second class rates. The post office does not forward second class publications; they throw them away.

KEY:

- ❑ ST-related review or article.
- ■ XE/XL related review or article.
- • Machine independent article.

From the Editor's Desk:

by Joe Waters

Welcome to another year of *Current Notes*. As many of you know, CN is published 10 times a year. Two issues are double-month issues, the January/February issue and the July/August issue. If you are just seeing this issue in February, don't worry. It is not late. It is scheduled to appear when the February issue would normally appear. We use "January" in the title just to remind readers that there is no issue in January.

We look forward to December since it gives us, finally, some time to catch up with things. Unfortunately, this year a number of illnesses hit the household and not very much productive work was accomplished. And, of course, events in January, when we are putting this issue together, have made it difficult to concentrate on producing *Current Notes*. Nonetheless, here we are starting another year.

This issue is the first one of Volume 11, the start of our 11th year. The very first issue of CN, a six-page unnamed user group newsletter at the time, appeared in May of 1981. Just think, in a few more months I can start a feature entitled "Ten Years Ago in CN." Not many computer publications can boast a feature like that!

You will find in this issue an index to articles published in CN last year. If you wonder what you are getting for your subscription fee, glancing at this index will be instructive. Each issue of CN is 84 pages, counting the covers. On average, 54 of those pages have text--articles, reviews, tutorials, commentary, news and regular columns. The remaining pages include advertisements, the table of contents, list of advertisers, cover, etc. Over 540 pages of Atari articles appeared in CN over the course of a year. Two-thirds of our coverage focused on the ST/Mega line. Eleven per cent was devoted to owners of the Atari 8-bit. The final quarter was independent of machine owned. We anticipate that 1991 will be essentially similar.

CN does have a volunteer staff of "regulars" who write frequently--eight authors contributed 10 or more articles over the course of the year. However, lots of Atari owners contribute to CN. We published articles from 67 people last year. An additional 45 individuals saw their "Letters to the Editor" appear in CN. All of these authors have contributed their time and effort to bring you, our CN readers, their insights and experience in things Atari. I would like to take this opportunity to thank all of our contributors. Without them, there would be no *Current Notes*.

This issue, as usual, is jam-packed with information. Indeed, with the one-month gap, I have received enough articles to fill much of the March issue as well. There are some truly interesting and exciting articles "on the shelf." You will see these in coming months.

Authors often wonder how we decide what to publish and what to hold. It is really quite simple. Regular columnists, since they write a monthly column, almost always get first priority. Secondly, since we are "Current Notes," timely articles, that would lose their value if published later, receive the next priority. The remaining articles are then chosen with an eye to balance. We prefer a variety of different topics and like to provide a little something for everyone in each issue.

Advertising placement also plays an important role in choosing the last few articles. If we need to place a half page ad, an article that is one and a half pages will be chosen over one that is one and three-quarters. Size is also an important factor. If you submit a six-page review, that competes with three two-page reviews. With our limited number of pages, it is very difficult to fit in very many long articles in a single issue. Finally, of course, articles that require extensive "editing" usually get put aside because of time pressures and, thus, wind up "on the shelf" for quite some time. Most CN authors really do write very well.

I encourage anyone who would like to share his opinions and ideas to submit an article. ST related articles should be sent to Frank Sommers and 8-bit material to Ben Poehland (see Table of Contents page for addresses.) Be sure to call in advance and check if you are planning to write/submit a product review. There is no need to put a big effort in if someone else is already working on a review.

Well, I had better end here. After all, there is this one more ad we have to fit in somewhere!

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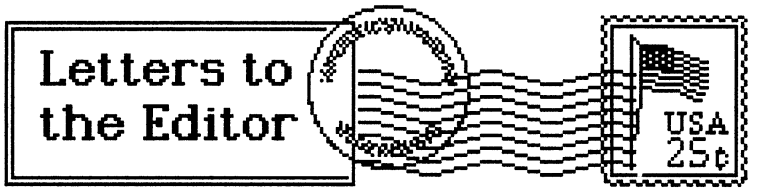

Union Bashing

To the Editor,

This is the United States of America and every opinion deserves an airing, but why my favorite computer magazine decided that David Troy's diatribe against Unions and working people deserved publication, without any space for an answer is beyond me. If the ignorance of Mr. Troy is the approved policy of *Current Notes*, I would like to know so that I can avoid purchasing your magazine in the future.

I am proud of my Union Card. Evidently Mr. Troy feels that a reasonable salary, safe working conditions and a little human dignity are a little too much to ask. He reports on one (allegedly) corrupt local of a Union with two million members and from that extrapolates that all Unions are equally corrupt, and all working people equally moronic. If Mr. Troy would like to see conditions in non-union shops, I will personally give him a tour of one of the 30,000 sweatshops located in the big apple. As a member of local 352 of the Teamsters Union, which has organized boiler repair people, I can honestly say that my life would be at hazard without my union. Every day I service high pressure steam boilers in nonunionized garment shops. This is dangerous work because the owners of these places do not pay for necessary, let alone recommended, repairs. The competition is too fierce. Only being a member of a Union allows me to walk away from these jobs, only the strength of a union behind me keeps me from being fired. Meanwhile, the desperate people who actually work there are constantly being injured. I might add that the new government policy of "letting business police itself" is a joke in the worst of taste.

Possibly if Mr. Troy gave the question some thought he would realize that one does not live and raise a family on what he considers a "reasonable wage." Just what this amount is he never states. No doubt he would reply that if you are not happy where you are, go get a job somewhere else--as if all the working people in America are members of the middle class with the upward mobility of a yuppie. I might add that it is the salary I make, fought for over the years with the blood of my brothers and sisters, which allows me to buy the Atari ST and, as a side effect, support the owners of stores like Mr. Troy's.

I enclose a stamped, self-addressed envelope so that you can conveniently inform me whether some sort of reply to the so called computer column of Mr. Troy is contemplated. I'm not trying to be nasty about this, but if I was Black, Mr. Troy just called me a nigger; if I was a Jew, Mr. Troy just called me a kike. In point of fact, Mr. Troy did, indeed, call me a corrupt moron.

David Barkin
New York City, NY

Dear David,

I'm sorry you were offended by Dave Troy's opinions on Union workers. I am not surprised, however, since I, too, thought that many union workers would not look favorably on his sentiments.

I have printed your letter in the letters to the editor section as a "rebuttal" and commentary on the column. I will be sending a copy of your letter, and this letter, along to David as well.

The strength of *Current Notes* is primarily in the quality of writing provided by its contributors. When we edit, we watch for punctuation and grammar but seldom take a heavy hand in editing content. As a result, the flavor of the various articles, particularly those of columnists who write regularly, reflects the personality and opinions of the individual authors. As we state on the Table of Contents page, "Opinions expressed in this publication are those of the individual authors and do not necessarily represent or reflect the opinions of *Current Notes* or any of the participating user groups, none of which are affiliated in any way with Atari Corp." We are, however, a vehicle through which people can express their opinions and, as I said earlier, I was more than happy to print your letter as a rebuttal to Dave Troy's column.

Joe Waters
Publisher, CN

In Response to Mr. Barkin's Letter:

I am sorry if Mr. Barkin, as a union member, was offended by my account of the Atarifest. My gripe was with the behavior and attitude of the union members that I saw, the fact that the union could force me into the forfeit of my own perfectly good labor, and the extra, totally unwarranted cost that the union caused the WAACE Atarifest budget to incur. What I saw was poorly managed, unnecessarily (and forcibly) hired labor. That, I feel, is inexcusable, and I feel little sympathy towards any of the union members or leaders involved.

Mr. Barkin feels that I extrapolated my entire view of unions from this one experience; I must say that this is not the first I've seen of this practice at computer shows. Labor unions and unwanted drayage have been popping up at these things for years, and I am quite honestly disgusted by it. Tell me why I should pay these union members to perform a service which I am perfectly capable of handling myself--especially when they are rude and unaccountable for the damage they may cause. It's as though you were forced to put your child in the care of someone you knew was abusive, and you had to pay them to boot! No one can tell me this is sane!

If this kind of forced, unwanted labor is the approved policy of labor unions in general (and more than one experience tells me it is), then I would like to know so I can avoid labor unions in the future! What Mr. Barkin seems to be saying is that while unwanted labor may be the approved policy of labor unions, that's not what they're really about, and on the whole they keep people in dangerous or stressful situations from being taken for granted and well compensated too. That's good. I don't argue with that. People in dangerous or stressful situations competently doing necessary work should be justly compensated. But people who force unnecessary labor, and do it poorly, should not be paid as if they were doing someone a service. Unfortunately, both of these categories of labor seem to fall under the aegis of unions. Unions should support **only** people who do necessary, wanted work well.

I have thought about what kind of salary is needed to "live and raise a family." I say again that people who are doing necessary work competently (as Mr. Barkin seems to be), deserve the wages that unions could very well have helped them earn. People who are doing unnecessary labor poorly shouldn't be polluting the work force.

Because of the sentiments I and others expressed, the Teamsters have been successfully negotiated out of the contract for next year's Atarifest, and I think that's a good thing. They were unnecessary, unwanted labor, doing a poor job at a task for people who would **gladly** have done it for themselves. The next time I know of a boiler to be repaired, I'll be the first to call Mr. Barkin; I think he'd do a good job, and I'd have no trouble paying him the wages his union prescribed.

Sincerely,
David Troy

P.S. - Thank you, Joe, for having the courage to print my article, Mr. Barkin's letter, and my response. It is good that we can constructively discuss topics which may only tangentially relate to Atari computerdom.

Lots of Spectre Print Help

Dear Editor,

Concerning the letter from Jack Burkig, Reno, NV, asking about how to make Spectre print.

I am using the ***PrintLink Collection*** from GDT Softworks, Inc. Currently, the software supports Okidata 390, NEC Pinwriter, Epson FX/LQ, Drionix 150/300, Panasonic

1000/1100/1500. I use the software with my Panasonic KXP1124--zero, problems.

It is installed on the system folder and replaced Mac's printer driver. They also have other drivers available which support Laser printers. Cost is around $100, very good support. Easy to use. Even comes with a Mac-to-printer cable. This is a serial printer cable for use with a real Mac. Atari needs no other cable. You choose the parallel port from Spectre and you're off and printing. Prints graphics just like Mac printer--cannot tell the difference from an Imagewriter II.

Dennis Bironas
Kokomo, IN

Print with PrintLink

Dear Editor,

I read with interest the December 1990 issue of Letters to the Editor, particularly the one referring to printing problems when running Spectre GCR. I hope this will help.

This letter was written with *Microsoft Word 4.0* and printed with *PrintLink Collection 3.0* (Dot matrix version) by GDT Softworks, Inc. The program can be purchased from Program Plus (1-800-832-3201). This printer driver prints in the standard graphics mode at 72 x 72 dots per inch, essentially a WYSIWYG (screen) printout. Unfortunately, the NLQ and Draft mode does not work with Spectre GCR (text comes out in condensed mode with weird or no formatting). It would be great if I could get better than the 72 x 72 dpi print resolution but hey! it's better than nothing.

I have used this printer driver with a variety of programs; for example, *MacWrite II*, *PageMaker 3.01*, *QuarkXpress 2.10*, *PosterMaker Plus*, *FileMaker Plus*, *MS Works* and *Dollars and Sense 5.0*. So far, I have not encountered any printing hang-ups.

My system is a 1040ST with a Z-RAM upgrade to 4MB, 85MB hard drive of which 50MB is allocated to Spectre GCR, mono monitor and a Star NP-10 printer. My Spectre GCR mode runs under System 6.4.

Many thanks for a great magazine on the Atari ST computer. Keep up the great work!

Anthony Foo
Placentia, CA

PrintLink and JetLink Express

Dear Joe,

I would like to reply to your questions on how to get the Spectre GCR to print. At the present time I am using a Seikosha 1200AI and an HP LaserJet IIP with my GCR with no trouble whatsoever.

I am using printer drivers from GDT Softworks, Inc. which can be purchased from any of the Macintosh software houses, Mac Warehouse, Mac's Place, etc. For the 1200AI, I use the Epson driver from the ***PrintLink Collection*** and for the IIP I use ***JetLink Express***. *PrintLink* also includes drivers for 24 pin printers.

In my estimation, GDT is the type of software house we'd like to see the others emulate. As a registered user, I received a minor revision without even requesting it and, when they charge for upgrades, they really give you value for your money.

Just put the printer drivers in the systems folder and select them with the Chooser. The documentation says that *PrintLink* requires, at least, System 6.0.3, while *JetLink* can use System 6.0.2. I use 6.0.3 for both.

No special hookup is required. Use the normal parallel printer cables.

I hope this helps other *Current Notes* readers with GCRs.

Vernon R. Smith
Fairfax, VA

Spectre and MacPrint

Dear Joe,

I am glad to be able to help on this subject, having just gone through the same experience as you with the ***MacPrint*** driver for the HP DeskJet and LaserJet series. But first I wish to thank *Current Notes* for expanding the Letters to the Editor section. I have learned much from reading about user's problems and the solutions thereof.

To get *MacPrint* to print to the DeskJet, it is sufficient that two conditions be met. (I haven't explored enough yet to determine what the necessary conditions are but I found two that were sufficient). The first condition is that the file DeskJet info (or DeskJet PLUS info) be in the System folder. These files are made and modified by the printer driver and placed inside the Insight folder which, in turn, is inside the System folder. The driver appears to create the files there and then it cannot find them. (The Insight folder comes with *MacPrint* and contains the cartridge information files).

The second condition to be met is that the printer be awake. Booting the Atari with the printer on seems to fix this, as does printing with *Superpaint*. Attempting to print with *Word V4.0* or *Works V2.0* does not wake up the printer.

I had bought the DeskJet 500, *MacPrint* and *Adobe Type Manager* two weeks ago for lots of bucks (I did get them all at sale prices) and found that they would not work with Spectre. I was so disappointed and I thought that I would have to give the whole lot to my son who has a real Mac Plus. Last weekend, while playing with the system again, I noticed two files (DeskJet info and DeskJet PLUS info) int he Insight folder (inside the System folder) that had that day's date. Upon checking, I found that they had not come with the *MacPrint* software. Perhaps they could not be seen where they were? I moved them out of the Insight folder, so they were just in the System folder. The Settings... menu on the Chooser dialog box now worked. I had been unable to bring up this menu before. I could now assign the port (printer), but still no printing from *Word* or *Works*. By chance, I tried *Superpaint*. It printed; the other applications now printed also. I rebooted everything with the DeskJet turned on; everything still printed. I was saved. The next day I put the info files back into the Insight folder and set a path to that folder, using Setpaths (shareware by Paul F. Snively). Everything still worked, so I left things at that. If it isn't broke, don't fix it.

I cannot help with Jack Burkig's troubles concerning the Star Micronix printer. Before getting the DeskJet, I had been using a Citizen 120D for several years (that thing has given no trouble, it just runs and runs). I was using the *Epstart* printer driver by Softstyle with the FX80 emulator and it ran right away without trouble. I did go through the installation procedure given in the instructions. Perhaps one could be in trouble if this procedure is not followed exactly.

Yours sincerely,
Martin H.R. Donald

P.S. I love the DeskJet. It prints very well with TEX also, and it does envelopes.

Installing MacPrint

Dear Joe Waters,

I noticed you were having trouble with MacPrint. I've been using it for about 6 months now so I'll step through the installation process and see if it helps you.

- From the Spectre set-up page, make sure that the printer port is parallel. Also, make sure that the printer is set for parallel port input.
- When you have booted to the Mac desktop, insert the MacPrint program disk.
- Copy the appropriate printer driver to your System Folder. You must also copy the folder called **Insight Folder**. This contains information about available font cartridges. Even if you don't have font cartridges for your HP printer, this folder must be in your System Folder. For example, for my LaserJet III, I have two files in the Insight Folder, **LaserJet Cartridges** and LJIII Info (of course you don't need the later file if you don't have a III series printer). If you have a DeskJet, then you just need the DeskJet Cartridge file.
- Select the Chooser from the Apple menu.
- Make sure AppleTalk is **Off**.
- In the Chooser, select the HP printer driver.
- You should see some information appear in the box above the user name entry (it happens to be which cartridges *MacPrint* recognizes.)
- Click on the button labeled **Settings**. A small dialog box will appear.
- Select the **Printer** port, not the modem port. Also, set the baud rate to **57600**.
- Click OK and close the Chooser.
- To make sure it works, select Print Directory from the Finder and see if it prints the directory of the current working level.

That's how I have my system set up and running. I am running system 6.04 (although it should work fine under 6.02 and 6.03). Which leads me to wonder if Mr. Burkig, the person whom you were answering, was using an older system and the printer driver he had would not work under the older system. Many programs now require 6.02 or higher and he might have been using an older version (System 4.2/Finder 6.0 is definitely older and not the same as 6.02 even with the 6.0 number). *MacPrint* requires system 5.0 (which is what 4.2/6.0 is) at least, but of course not using 6.02 cuts you out from using many great programs such as *Adobe Type Manager*.

Marshall Vale
Pawtucket, RI

Village Does Do Repairs

To the Editor,

Over the course of time we have read about the lack of repair facilities for the Atari ST series of computers in the New York City area. One article that we have seen mentioned our store (Village Computers, Inc, 687 Broadway, NY, NY 10012) as a dealer for the ST but stated that we did not do repairs. Such is not the case.

We are an authorized Atari repair center for the ST computer. At the moment, we do not sell the ST, but we are more than happy to do repairs. Unfortunately, Atari takes its time in filing our orders for parts, thus the turn around period can be very long.

We hope this clears up any misunderstandings,

Vincent Nelson
New York, NY

HP LJIII and Legal Paper

Dear Mr. Sommers,

I read with interest the two articles on the HP LaserJetIII in your October issue as I was considering purchasing that printer. Dennis J. O'Boyle's article almost dissuaded me, but I decided to take a chance and get one. I am happy that I did.

I believe that Mr. O'Boyle's problems with printing legal sized paper were the result of not trying all the possibilities in deciphering the *Calamus* and Hewlett Packard instruction manuals. I, too, ran into the problem of legal sized paper only printing 10.79 inches but then I noticed that in the *Calamus* printer dialogue box, I had left the "Paper Feed" on "Tray" instead of changing it to "Manual." Once I did this, I still had problems getting the printer to print anything until I changed the Control Panel settings on the LJIII to "Paper=Legal," "Orientation=" (not Landscape which *Calamus* accomplishes by itself)" and "Manual Feed=On." The printer sucks the paper in the manual load by itself and has no problems printing legal sized paper.

I am enclosing a sample of what I printed. I used Cherry Fonts (Unit #4, 2250 Tyner St, Port Coquitlam, BC V3C 2Z1) which I have to plug because they are so well constructed, inexpensive and well-supported (free upgrades) besides being a local product.

I just received the new Nov/90 *WordPerfect* Update which contains printer drivers for the HP LJIII Courier, Univers and CG Times fonts (each in eight fixed point sizes). The update also now works on my Moniterm monitor! The drivers don't access all of the capabilities of the LJIII, however, but I figured out how that to get the printer to do everything that it is capable of doing. All you have to do is change to the DOS TEXT printer driver and that will allow the LJIII Control Panel to override the WP printer driver. The Control Panel will not override the three LJIII drivers.

LDW Power spreadsheets printed fine once I stuck "\027(3@" as the default printer setup instructing the LJIII to use the default printer font. The Control Panel again can be used to access other internal or cartridge fonts.

The HP LaserJet III is a great printer for the Atari ST. I love it!

Jay Hirabayashi
Vancouver, B.C.

More on Key Chatter

Dear Frank,

Apropos of the Atari Key Chatter comments in the December Letters section, I find that I have been experiencing the same phenomenon in a slightly different fashion. When a file listing is displayed and I wish to select more than one file, I click on the first, then move the arrow to the second, hold <SHIFT> and click on the second and so forth. If, while moving between selections, I press the <SHIFT> key, the chatter occurs. The effect is a constant refreshing of the file list as if the <ESC> key had been pressed. The audible chatter continues until the computer is rebooted.

This does NOT happen with my 1040ST with TOS 1.0; only with the 1040 having "Rainbow" TOS installed.

Perhaps if enough of these instances are documented, someone will be able to find the cause and correct it.

Sam Van Wyck
Linthicum, MD

Where are Mac ROMs?

Dear Mr. Waters,

Help! By publishing this letter in your fine magazine, I hope I can get some help from you or your readers.

Just before Christmas, I was trying to purchase the Spectre GCR. In doing so, I attempted to find Macintosh ROM's to complete the system. Unfortunately, Mac ROM's are no longer available, even from Apple dealers. Luckily, I did not purchase the Spectre GCR in advance.

What does this mean for future Spectre owners? Or the fate of the Spectre family?

Does anyone know what's wrong with Future System's Indus GTS 100 disk drive for the Atari ST? This inconsistent drive has given me, and everyone I know who owns one, many problems. Future Systems will replace only the drive mechanism (with a remanufactured one) for some outrageous price but they will not repair or replace the unit. This and other GTS drives have had the drive mechanisms thoroughly tested and that is not the problem. I don't want to waste anymore money on this failing device unless it can be repaired. The consensus is it is NOT repairable. Are there any hints for getting this oversized paperweight working?

Brad A. Utschig
Federal Way, WA

[It seems that Mac ROMS are getting harder to come by. Some dealers, however, do have them in stock, but they are more expensive then they used to be. If dealers do have Mac ROMS available, let CN know and we will pass the word on to our readers.

I'm sorry about the problems you are experiencing with the Indus GTS 100. I can let you know that we have an Indus and it has provided flawless, heavy-duty performance for the past two years. -JW]

CodeHead Corrections

Dear Joe,

This letter is in response to "CodeHead Corrections," a letter from the owners of CodeHead Software referencing a review article titled "Doing Things a Different Way," by J. Andrzej Wrotniak.

Specifically, it is about the part where the CodeHeads accuse him of bias by referring to competing products.

Although Mr. Wrotniak's response was complete and gracious, I wish to bolster his repudiation of the criticism just a little. It is totally ridiculous for the CodeHeads to consider reference to competing products biased. *Hot Wire/Maxifile* is a power combination, no doubt about it (in fact, I use *Neodesk/Maxifile/Little Green File Selector* vice *Neodesk/UIS*)--but, it is not competing against itself and the fact of the matter is that most ST users prefer a graphic user interface similar to GEM (Andrzej refers to it as "working habits") as evidenced by Gribnif's sales of *Neodesk*, and no amount of bragging or bad mouthing of reviewers or other software companies is going to change that fact. If it was the CodeHead's goal to code the standard de facto user interface replacement for the standard ST GEM, their problems began in the design stage when they chose to abandon a windowing environment and opt for the *Hot Wire* environment. There is no doubt in my mind that if Charles Johnson (master assembler) wanted to, he could develop the fastest, most feature packed, memory efficient windowing user interface for the ST (maybe any computer). He has so far chosen not to and I don't believe that *Hot Wire* will ever be totally

accepted by the ST community (this last statement is a little subjective).

Matthew Gann
King George, VA

[User interfaces are a personal thing. Different people like to work in different ways. Some people like GEM, others prefer to use a command line interface on their Atari. *Neo-Desk* does have a lot of fans, but don't underestimate *Hot Wire*. Indeed, Richard Gunter has chosen to use that program as the focal point of his "Starting Block" column this month. It's actually very nice to have a variety of choices on the Atari. -JW]

MIDI Mouse's Key Disk

Dear Editor

This communication is prompted because I have just purchased a four-set program of "Songflight" Midi music lessons. I was shocked to find out I could not make back up copies of any of these sets after trying to for a day and learned that they were copy protected--(I am too used to running non copy protected programs). This should have been stressed before I bought them. I do respect the right of a developer to copy protect his works, but I should be forewarned of this before I buy the product! What is worse, I called up the MIDI Mouse Phone Number, four times, to ask certain questions about their product at (503) 622-4034 and was supposed to get a return call. I never did!

I could not even get their product running for days until I went over their confusing instructions which another computer enthusiast also found confusing. I finally got the programs running by installing what they call a key disk by booting and running it unprotected! In other words, it can be inadvertently ruined and you have to have separate key disks for each of the four sets I bought before they run. If you ruin a disk, you can get another key disk for $15. You cannot use a hard drive without a key disk. In other words, you've got all of these key disks floating around to get lost or be ruined. I bought a hard drive to avoid all of this. I normally make all back ups (in triplicate and store them on changeable 44 Mb hard drives. I have found that triplicate back ups are the best way to go. Midi Mouse only lets you buy one key back up disk for each set.

The reason I bring all of this out is that, looking over their program and manuals, I find it a good product and it is sabotaged by their key disks. If allowed to go over their one key disk limit at $15 each, one would need 12 key disks floating around in triplicate for their four-set program at a cost of $180. That could be easily compromised as they are run unprotected. The product is a downer for lack of service to the customer and other drawbacks that should be looked into for the consideration of the buyer. They also demand that the program be registered in 10 days, which is ridiculous to test out the product before it is accepted, especially when one has four sets to go through. Some users might take longer than that to just boot up if they get no cooperation from the producer. There must be others out there with similar problems as the product has labels on the folder on how to load it with the disk tab in the write position which is unconventional and hard to comprehend. I eagerly await any corrections on my comments from Midi Mouse, if I ever hear from them.

Tony Mallin
Chicago, IL

STe Incompatibility

Dear Mr. Sommers,

I was faced with the current need for at least one megabyte memory capacity in my 520ST so I agonized over how to upgrade it for quite awhile. After looking at the options and hearing about the problems of doing so, I decided to trade it for a 1040 STe with an extra megabyte. I had read about the fact that some ST programs that didn't follow the Atari operational protocol exactly will not run on the STe. However, I didn't realize how many of the ones that I have would be like that. Also, I hoped that someone would find a way of getting around the problem and, in fact, I had read somewhere, I think that it was an ST Informer issue, that someone selling STes included a program that simulated the old operational system and would allow the running of the ST programs that shortcut the Atari protocol. I believe the program was the one that was included as a disk with the old ST before they got FCC approval for the built-in version.

I am sure that many people buying STes as replacements will be as frustrated as I am at not being able to run some of their favorite programs and not having access to their text files. Also, they won't know whether seldom used programs will run until they try them and even then, if they won't run, they won't know if it is the operational system incompatibility or some other cause. For them and for first time buyers of STes, they won't know, in many cases, that ST programs that they might want to buy will run on the STe unless they ask the seller or he specifically says so, which some are starting to do.

One might question the "user friendliness" of Atari in making much of the old ST software useless or questionable when owner confidence and loyalty ought to be one of their major assets. A personal library of familiar software is one of the strongest reasons to stay with the same brand of computer. This has been lost for the ST line.

Could you discuss this problem in an issue of *Current Notes*? If there is a possibility of issuing a *Current Notes* library disk that would get around this serious deficiency in the STe, it would be of immense help to many of your readers, I'm sure.

James O. Spriggs,
Kensington, MD

[The 8-bit Atari had a "translator" disk to switch back to the old operating system. I don't know if any such disk could be provided for STe owners. We will check into it. I have started receiving calls that some of the PD software won't work on the STe. This was also true when Atari went from TOS 1.0 to TOS 1.4. CN, as yet, does not have an STe so we cannot check library programs for compatibility. In time, (depending on when it may become available) we may purchase a Mega/STe and will then be able to provide STe compatible disks. -JW]

1990 Bummer

Dear Joe,

I am resubscribing to your publication because I find it to be a good eye and ear to Atari. And several times I have purchased software based on your reviews. The year 1990 was a bit of a "bummer" for me, however.

In June, after reading your review of *Quick ST*, I sent off a personal check for $23 to Branch Always Software in Ontario, Canada for one copy of *Quick ST*. By September, I had not heard anything although I had received my cancelled check. I called their number in Ontario only to be switched by an answering service to another number that was out of service. I next wrote to Ontario including xeroxes of the cancelled check, but still no word. Then, in October, I learned about the move to the Seattle area. I wrote again and called again and left a message on their answering service. Still no word and I have my cancelled check.

Another disappointment. Soon after reading your review of *Wordup 2.0* I decided to invest in a copy. The review sounded as though *Wordup 3* would be a good addition to DTP software. I have installed it twice but am finding the program fraught with crashes and freezeups. Calling Neocept brings an operator message "out of service." So, you see why I call this year (1990) a bummer.

Robert Livingstone
Falmouth, MA

Help Convert French ST

Dear Sir,

Please explain how I can convert a French 1040STFM to American current and Hrtz. The French use 220-60hrtz, and I believe if I change the power supply inside the machine to 110-50 hrtz this should solve my problem. Also, can I change the "key" chip under the keyboard to convert to a "qwerty" keyboard and then change 5 or 6 keys to make my 1040 work in America. The desktop will remain in French, but this is no problem. Thank you in advance,

Dana Davis
Eugene, OR

[I know I can't answer those questions, but perhaps some of our readers can. -JW]

Once Again Atari Restructures, Price Reductions for STe's & Lynx, Mega STe Appears, Stiff Competition Ahead for TT's

The Good News

Atari has cut prices. Atari hardware appears to be selling quite well via dealers across the country. TT's are being sold to selected dealers, with some hint that the FCC approval to sell the machine to non-business users may only be a month or so away. Capping all this is the appearance of the Mega STe. Yes, dealers are beginning to receive the machines and are pleased, indeed, with them. At $1,700-1,750 with a 14" color monitor with stereo sound, the machine has appeal. The TT without a monitor fetches $2,400. Couple it to the TT030 monitor at $549 and you have a "big machine" for $2,949. So, once again, Atari has a product line with strong performance and price appeal.

The Bad News

We all make New Year's Resolutions. We all break them. Ours was simple. If President Bush avoided war, we would avoid further criticism of Atari's managing, marketing, sales, and personnel policies.

We don't wish to make light of the tragic fact of the war; few things in the past decade have made our heart so heavy, despite the initial astounding military and technological success of men and equipment. But it's happened, so here we go.

The TT and the STacy, after more than two years, still are without FCC approval. Can a company be serious when one third of its major product line is "crippled" (Lynx, Portfolio, Mega STe's and STe's are the four others)? Its "plan" to reinvigorate the U.S. market with the TT, and the laptop STacy is seriously flawed when it has to ask its dealers to send it a letter specifying they have a Class A customer, (business only) for either of the machines. Atari claims it will have a major, "large, large, indeed," advertising campaign for the TT beginning in March, when, presumably, the machine will be

available in greater quantity (fewer than 100 are now scattered around the U.S). TV, you ask? No, no, Atari believes TV advertising isn't cost effective, so it will be a "print ad attack."

Atari's Bob Brody, when asked about lack of FCC approval for Atari's STacy, purportedly said that the lack of Class B FCC approval and the requirement for dealers to testify to their business market access was, "....the way it was supposed to be all along ... we're still shipping STacy's; we're just covering our bases while we do it." We can only conclude he was not inviting the FCC to a shoot-out but, instead, was misquoted.

Although, as noted, the STe sold well throughout the Christmas season, its position in the market place is unclear. David Plotkin in an excellent review of the STe in *Start* magazine, raises the question of why the computer didn't include more of the innovations available to it and which are contained in the Mega STe, e.g. no expansion bus and, thus, no big screen Moniterm capability, and only 16 colors displayed at a time. He concludes, on the basis of the extra joystick ports, the hardware scrolling, extended color and stereo sound, that the machine is designed for the game market both in Europe and the U.S. Problem: the STe is compatible with less than one third of the European game software that was made before last September.

So much for New Years.

Perestroika Atari Style

Abraham Lincoln and Sam Tramiel appear to have had one thing in common. They both believed it was essential to change generals with promptness when your war was going badly. Atari's "business is war" campaign has stalled out in the mud of the U.S. market. So another general of sales management bites the dust. This puts Atari into more than a baker's dozen of such changes in the last couple of years. The latest loss, and it is a loss, is Bill Crouch, VP in charge of sales. He and most, if not all, of Atari's sales reps were let go in early January, just a few days before the Consumer Electronics Show in Las Vegas (10-13 January).

Along with the restructuring of sales came the rumor of another innovative "game plan." Purportedly, Greg Pratt would be relinquishing his job as head of U.S. operations, a job he'd been given when Elie Kenan left it to return to a more genteel Atari Paris environment. Presumably, Pratt would go

back to his financial tower, where he has long been and long enjoyed the confidence and respect of Jack Tramiel.

And who, but who, would possess a skin of thick enough armour to step onto a battlement that has slain so many so fast. The rumor is that a student of Von Clauswitz, the famous Prussian authority on war, is considering picking up the swagger stick. The Feld Herr (field marshall) of Atari, Germany, Al Strumph is supposed to do to the U.S. what he's done to Germany on Atari's behalf. We have not been able to confirm this switch, and as of this writing, Greg Pratt was rather firmly in place in Kenan's job.

CES

What comes after the Lynx, if you're using animals, fast ones, as names for your sports cars or even, say, your computers? Panther, of course. And that was the new 6800 game machine that Atari showed off in Las Vegas. The Lynx was everywhere with a new $99 price for the stripped-down version with no software, and no two player cables. (The Lynx kit was also reduced by $30 to $149.) Along with the price cut was the introduction of a number of new game cartridges for the Lynx. But, as usual, there was formidable competion snarling loudly and coming on rapidly. Currently, Lynx, as a machine, is a clear winner over Nintendo's monochrome Game Boy, yet the latter has outsold the Lynx by more than 10 to 1. (Atari claims it has shipped 250,000 Lynx. There are almost 3 million Game Boys out there.) And now here comes Game Gear, the Sega hand-held computer game machine with 3.2 inch, high-rez color screen graphics, superior to any other hand-held system. As competition for the Panther, there's the new Super Famicon, the advanced high speed videogame system from Nintendo, which already has a 50 million game-machine user base here from heavily advertised sales of its present machine. Topping off the game machine displays was the Cadillac of all of them, the Neo-Geo. Selling at $600 it duplicates an arcade machine in almost all performance respects. Now, if that's not enticing enough for us game players, NEC has linked a laser-based CD player with its TurboGrafix system, giving it about 100 times more coded game information than a normal game cartridge. So, we are fast arriving at true interactive game machines, displaying full-screen, full-motion video, in addition to high fidelity sound and highest resolution graphics.

Atari also announced a more competitive price for the 1040STe --$499. Considering the current low cost of 1 meg memory chips, circa $50 each, and the SIMMS architecture of the STe (permitting easy memory upgrades) you can have a 4 meg machine for very little money these days, $650-700. The original Mega ST4's were almost twice that, but also with the cost of the monitor not included.

Neocept Gives Up

Neocept is no more. The developer of *WordUp* and other products has sold the rights to its programs to Pacific Software Supply of San Louis Obispo, CA. We recently reported that Neocept had made an interim arrangement with the E. Arthur Brown Co. to supply upgrades for *WordUp.* Pacific has taken over the responsibility of getting upgrade disks to dealers. If your dealer does not have them, suggest he contact Pacific. If you have no access to an Atari dealer, Pacific, which is a wholesale distributor of Atari software, including European programs, will try to help you (1-805-543-1037).

One Down, One Back Up

From Cambridgeshire, England comes word from GST, the developers of *Publisher ST,* to *Current Notes* that after some discussion with Timeworks Inc., the English firm has learned that Timeworks will continue to support and distribute *Publisher ST* in North America. However, GST still has no plans to develop an upgrade for the current version 1.1 of their program. A false rumor that they would do so somehow sprang up at the last Comdex.

Slings and Arrows vs Sticks and Stones

An Atari Corp. denunciation on GEnie or a slur in an electric newsletter is one thing. After all, we've been carefully taught since babydom to ignore sticks and stones onsluaghts. But slings and arrows are something else. And when out of New Zealand comes the electric announcement that your ST-UPDATE columnist is "working for Atari," why, then the turn-the-other-cheek gesture requires the kind of steely control and self-discipline that can only be acquired thru reporting the facts about Atari. Sad to relate, such was the case during an exchange on USENET back in December. In the course of suggesting that Atari was taking over Neocepts products, the unthinkable occurred. From down under in Kapiti, New Zealand came the damning accusation that we were in the pay of our friendly adversary in San Jose, CA. No way, Jose!

UNIX Delayed

In a small room in Atari, right next to that dark hole where Atari hides all items introduced but never released, sit three very bright and able UNIX programmers. They are the in-house secret weapon that Atari has cobbled together to port UNIX over to the TT. For a while UniSoft, the rather large development company, that did UNIX for Apple, was under contract to produce Unix System 5, Release 4. But, for reasons unknown, though possibly involving repetitive changes in the TT system, necessitating all too often changes in the "standards" Unisoft was required to meet, there was a termination of the relationship. Now, the Unixteers, as the three are known, struggle to bring glory to

their company. The difficulty is, however, that knowledgeable programmers tend to agree that such a port would require several dozens of programmers to bring it into being. The betting now is that the TT will live its life without UNIX.

Mihoca Sees ST as "Dead End"

Appearing in electric print in an article in STReports, Darek Mihoca, who developed the Atari 8-bit emulator for the ST and then the excellent accelerator software, *QuickST*, and who is now President of his own software development company, declared that the ST was now a dead end. It might take a year or two, but the handwriting was there. Those of you who read our obituary for Atari in the December issue are aware that we agree with Darek. What was surprising was the amount of "flak" flung in his direction after his comments appeared while he was describing the virtues of Windows for the IBM and IBM clones. The critiscism was all the more unfortunate because Darek has done as much as many and more than most to make the ST a more useable, enjoyable machine. His 8-bit emulator allowed many Atari users to make the decision to move up to the ST, feeling that they could take their old software along with them. Some of the negative comments about Darek's claim that the IBM was a more facile machine involved speed and cost. Darek maintained that, with the lowered cost of clones, you can spend under $1,500 for a 386SX based system with all the memory and graphics and color and speed of your ST.

TT Beware

What Darek wasn't aware of at the time the above was taking place was that IBM clones would now also challenge the TT, just as it started to ship to dealers. Positive Corp. (Chatsworth, CA; (818) 341-5400) has distinguished itself by producing the latest high performance machine using the IBM platform. Dubbed the "Positive 486," it's a 486 running twice as fast as the IBM 386 on the Norton scale. The cost is the same as a TT, under $3,000. It comes with 2 meg of memory, a 106 meg hard drive, two floppy drives, a VGA color monitor (1,024 x 768 pixels) and a keyboard and MS-DOS 4.1 operating system, plus Windows 3.0 and working models of several Windows programs. Leaves you rather breathless, doesn't it. And that configuration makes it even cheaper than the TT's projected cost by several hundred dollars. Will it be hard to find and when can you get it? It's available now at Price Club and Sam's membership stores. You can also mail order it for a bit more. And it has FCC Class B approval.

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Quick ST II and Quick Tools are available at most Atari ST dealers across the U.S. and Canada. If ordering direct, add $3 s/h for U.S. destinations, and $5 elsewhere. U.S. dollars only please. For credit card orders, call our order line at 206-783-0933, business hours.

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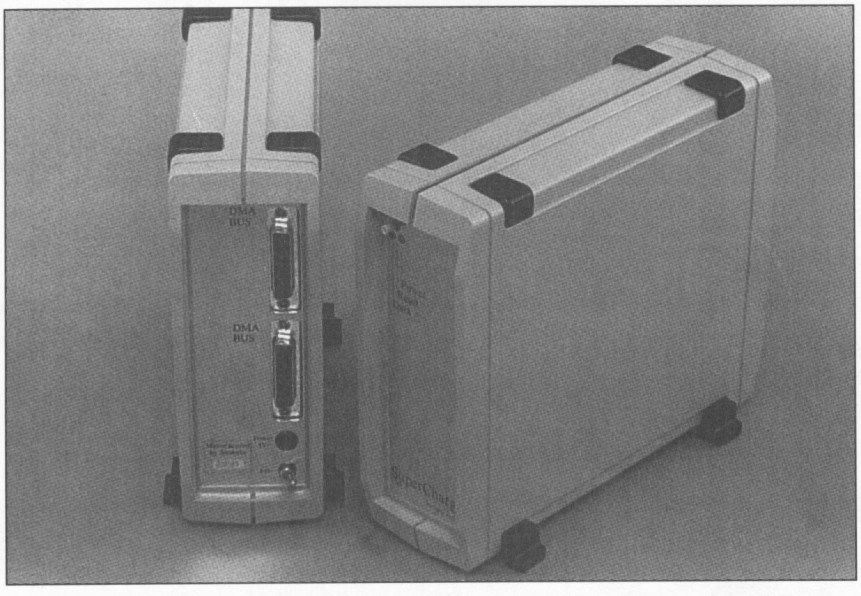

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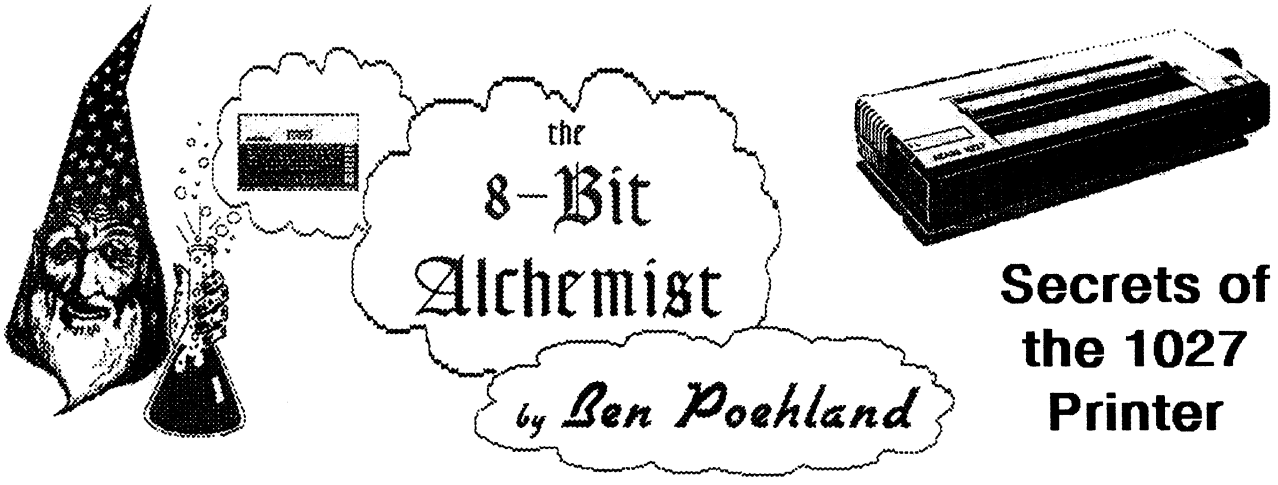

Secrets of the 1027 Printer

The primary mandate for my involvement with *Current Notes* was to present as much information as possible on 8-bit hardware, maintenance, and performance improvements that, hopefully, will allow us 8-bit fans to keep going long after the 16-bitters have burned themselves out. Along the way, I have gotten distracted from my purpose by issues arising in the 8-bit marketplace. As a representative voice in the 8-bit community it's kind of hard to ignore what's happening Out There, and in any event, it finally dawned on me we can't keep those old 8-bits humming without support from, and knowledge of, the marketplace. So now I reckon The Alchemist has two mandates. But before I launch into this month's dissertations on Twilight Sources and 1027 printers, an acknowledgment is in order.

Logo Kudo

The Alchemist owes a big thanks to Jim Dupree for the nifty logo design for this column. Artsy-type stuff is not the Alchemist's forte, but Jim demonstrated a touch of the alchemist's art by "transmuting" my rough sketches into the impressive presentation at the top of this page. Hmmmmm.... good thing I didn't tell him my sketches were sprinkled with Floobydust. Regular readers might recall Jim's participation in grass-roots efforts to fight drug abuse and rehabilitate his particular corner of inner-city Baltimore, and the support he received through *CurrentNotes.* Obviously, a man of multiple talents, Jim is a pretty fair graphics artist as well. Thanks again, Jim!

Newsbytes

I receive a periodic flyer from a surplus electronics outfit called Star-Tronics (P.O. Box 683, 520 E. 4th St., McMinnville, Oregon 97128). Operated by a colorful fellow named Bruce Stellar, the flyer is interesting not only for its incredible deals on surplus electronic components, but also for the little bits of humor and wisdom ole' Bruce tucks away in odd corners of his ads. Anyway, his catalog W (November 1990) offered Atari 800 replacement keyboards brand new for five bucks ($5.00), catalog # W170. Give the man a call at 503-472-9716 if this sounds like a deal you can't refuse. A sample of wit from the Star-Tronics flyer: "Some minds are like concrete: all mixed up and completely set." Sounds like Bruce might once have worked at Atari.

Twilight Sources

The Alchemist is most grateful to readers who wrote to tell of 8-bit sources I missed the first time around.

BELLCOM. P.O. Box 1043, Peterborough, Ontario, Canada K9J7A5. Described as having the largest selection of PD software available anywhere. Prices are quoted in U.S. dollars, $3.50 for single-sided and $3.95 for double-sided disks, with volume discounts and a flat fee shipping charge of $3.50. Their 1990 catalog was 40 pages, with a mid-year supplement of 10 pages. Definitely worth a postcard.

COMPSULT. P.O. Box 5160 San Luis Obispo CA 93403-5160 Toll-free order line 1-800-676-6616, inquiries to 805-544-6616. Operated by Brent Dill, this place specializes in closeout items for all brands of computers. The catalog listing is 16 pages, with 3 pages of Atari stuff. Atari items of interest include ST and 8-bit software, 2600/7800 videogame carts, 400/800 circuit boards and parts, and service manuals/schematics for most ST and 8-bit models. Credit cards accepted, $25 minimum order.

Secrets of the 1027

It was the 1027 printer that drew this Alchemist into the world of Atari. Seven years ago I came close to buying a Commodore, but I was bummed out by the appearance of 7- or 9-pin dot-matrix printing that seemed the only thing available for the C-64. When I saw the typewriter-like, true letter-quality output of the 1027, I was

instantly hooked. I own two 1027's and used them heavily for about five years; my Mom now uses one of them in her system. Even after thousands of pages of print, these slow, spindly, clattering machines continue to churn out 12-pitch typewriter font. There is no reason a 1027 couldn't continue on forever, except that a pall of doom hangs over it. I'll go into this in greater detail later, but the sad fact is that no matter how well preserved your 1027 is, its days are numbered. In the meantime, however, you can still get a lot of use from that old printer.

The Launa Mystery

Every 1027 came with a little plastic bottle of oil bearing a silver label with the cryptic words "LAUNA FOR 1027" on it. Of course, you knew it was oil, but to this day The Alchemist still doesn't know what "launa" is; even the Wizards and Warlocks have failed me. (Sounds like a nice name for a girl, though.)

The pathetic excuse for a manual that was furnished with the 1027 admonished the user to occasionally use the oil to lubricate the gears under the access cover. Good enough advice, I suppose. Except that after a year or two of heavy use your 1027 would freeze up, run amuck, print gibberish, and generally cease to function if you failed to oil it, or if you only oiled it according to the instructions. No matter, most people I've seen with 1027 problems had long ago lost the little oil bottle anyway. I would guess 50% of all 1027 failures are due to improper lubrication. The fix is easy and doesn't require a Ph.D.

Lube Job

A 1027 will go berserk when the bars that support the print head become dry, corroded, or contaminated with dust and paper lint. (I have dust covers for all my printers and use them religiously.) The print head gets hung up on the bar and then does a bizarre suicide ritual trying to obey the ongoing stream of commands fed to it from the computer. The 1027 is a rather "dumb" peripheral and doesn't seem to know when it has entered a mechanical ERROR state. Just about every other printer I have used senses mechanical faults and sends a FAULT message back to the computer, which terminates data transmission. But not the 1027.

The cure is to simply oil the two bars that support the print head, and also the two bars behind the print head that carry the striker. These four bars should always be clean, shiny, and oily. And, of course, it doesn't hurt to oil the gears, too. Avoid touching the bars with your fingers, as the acidic components of sweat will corrode the metal. Remove the top cover of the printer to gain full access to the bars; do this by removing the four deep well screws on the bottom and the machine screw located on the rear panel between the SIO sockets.

Don't despair if you lost your "launa." Go to your nearest Radio Shack store and buy a tube of some stuff they sell called "Lube Gel." And while you're there, pick up a package of wooden-handled Q-tips. Lube Gel is a nice micro-particulate suspension of Teflon in a silicone oil base. It stays where you put it (doesn't migrate) and doesn't decompose, dry out, or polymerize the way petroleum-based lubricants do.

Apply the gel sparingly with a Q-tip to the bar and rub it in. A thin film is all you need. Work the print head and striker back and forth on their bars to spread the film. In one instance, I had to first clean a badly corroded bar with ultrafine 0000 steel wool to remove corrosion obstacles before proceeding with the lube job. When you're done, the print head and striker should move smoothly on their rails in either direction with no binding or holdups. This lube job has always been a sure cure for an erratic 1027.

Sleeping Beauty Syndrome

Upon acquiring my first 800XL with the original version (Rev A) AtariWriter ROMcart, I was dismayed to discover that Rev A did not contain a software driver for the 1027. In those days, APX was still a going concern, and I purchased Gary Furr's original AtariWriter printer driver set from APX. There was a 1027 driver in the package which, at first, seemed to work OK.

But during printouts of long documents, the 1027 took naps. At unpredictable intervals. And after 255 seconds, it woke up and continued printing again. Sometimes it "napped" as often as thrice per page. Maddening. I put up with this for nearly a year, even fired off a letter to ANALOG about it. ANALOG printed my letter (issue 28) along with their utterly useless reply.

In 1985, while working with Gary Furr in beta-testing an AtariWriter printer driver he wrote for the Epson LX-80, I learned that the 1027's napping behavior was well known as the "Sleeping Beauty Syndrome." It, apparently, arose from a bug in the XL OS coupled with a misunderstanding between Atari and the 1027's Japanese manufacturer (Alps?? Seikosha??) that resulted in their placing a 255-second timeout in the 1027's firmware. Gary Furr had written a revised 1027 driver that fixed the bug, but APX, apparently, never got around to replacing the original 1027 driver with the revised one on the disks they sold. Gary provided me with the revised version, and it continues to perform flawlessly with my 1027 to this day.

I did encounter a bug when I formatted my AtariWriter boot disk with SpartaDOS XC2.3e containing the 1027 printer driver as an AUTORUN.SYS file. I sometimes boot up these disks without AtariWriter so I can use DOS to transfer files. A system crash occurred when I attempted to load the SpartaDOS menu. The cure consisted of hitting RESET before typing MENU. This simple procedure "dumps" the

printer driver into Never-Never Land, allowing the menu to load properly.

Fortunately, Atari incorporated the fix in a later version of the AtariWriter ROMcart: Rev C has a built-in 1027 driver that won't allow the printer to sleep on the job. The Rev C ROMcart is available from the B&C catalog.

MissingComponent Designations

We Alchemists are compulsive types: we hate buying any electrical gadget that doesn't come with electrical schematics and hardware docs. I have hardware docs on just about every component in my system (including the XL power supplies--ahem!). As hardware docs go, most of the Atari manuals are pretty decent, giving explanations of circuit functions, disassembly instructions, and lists of electronic component designations for repair/replacement.

When Atari released the 1027 manual, they muffed up. The manual fails to include a list of discrete semiconductor (transistor) designations, although chip identifications are given. Neither are any resistor or capacitor values given, not even in the schematic. In true Alchemist spirit, I carefully researched the circuit board and came up with a list of transistor designations and resistor/capacitor values (see box).

A few years ago, The Alchemist submitted this information to one of the major slicks--can't recall if it was *Analog* or *Antic*. They never published it.

RollerInk

Every new 1027 came supplied with two ink rollers. You could get about 50 printed pages from a roller before it went dry. Some clever folks discovered the rollers could be re-inked. Not only did this greatly extend the useful life of the roller, but quite often the print quality was improved. Most stamp pad inks these days are water-based: not the best thing to use. Oil-based ink, such as numbering machine ink, is better. Oil inks are hard to find, but a good office supply outfit will usually have it. The Alchemist has been re-inking 1027 rollers for years, with excellent results.

Nothing lasts forever, and after many re-inkings the original rollers eventually wear out. I would estimate I got 1500 pages from an original roller. The print wheel gradually wears grooves into the roller; as the grooves get deeper the roller loses contact with the print wheel.

Transistor designations and resistor/capacitor values for the Atari 1027 Printer

Transistors:

Q1-Q8 :	2SB641
Q9-Q10 :	2SD636
Q11-Q17 :	2SB641
Q18 :	2SD636
Q19-Q21 :	2SC3518 or 2SC3427
Q22 :	2SB983

Resistors:

(ohms, 1/4 watt, 5% carbon film)

R1 :	220
R2 :	100K
R3 :	33K
R4-R11 :	10K
R12 :	100K
R13 :	33K
R14-R17 :	22K
R18-R31 :	10K
R32 :	100K
R33-R34 :	10k
R35-R38 :	2.2K
R39 :	0.43 ohm, 1W, metal film
R40-R42 :	100
R43-R46 :	180
RP1 :	10K

Capacitors:

C1 :	15,000uF/25V electrolytic
C2-C5 :	10uF/16V electrolytic
C6-C8 :	10uF/16V tantalum
C9-C12 :	.001uF/25V ceramic
C13 :	10uF/16V tantalum
C14 :	.1uF/250V ceramic
C15 :	470uF/16V electrolytic
CP1 :	300nF (double)

The print grows ever more faint no matter how much ink you apply to the roller. In 1987 I tossed my worn roller into a drawer (alchemists are pack rats), clipped on the spare roller and printed merrily away. In 1988 I noticed the telltale grooves beginning to appear in the new roller, so I decided to order up a mess of spares to have on hand before that one wore out. At $3.00 each, B&C had the best price; I bought five.

In late 1988 I replaced my worn roller with one of the units I had purchased months earlier from B&C. To my great annoyance I obtained fewer than 100 pages of print from this roller before it developed deep permanent grooves. It also desposited inky lint onto the print head, resulting in lower-case letters such as o, e, and g being printed as solid blots; I spent a lot of time cleaning the print head with a toothbrush. The roller had been in service only a couple months. It was early 1989 when I opened the second package of the spares from B&C. This roller performed even more poorly than the first. In just a couple weeks, with fewer than 25 pages of print, it was shot. But this second roller did more than wear out quickly. It self-destructed. The consequences of this were truly evil.

Little Specks

The first time it happened was like this: with the second B&C roller in the 1027 installed on my desk at work, I printed out several copies of a memo. Removing the finished copies from the machine, I noticed they were sprinkled with black flecks which I instinctively brushed away. Big mistake. The specks turned into long black smears that instantly ruined my copies and soiled my hands. Desperate to finish my work, I managed to print out some more copies with only a few specks, which I removed one at a time with tweezers.

During the next few days, as I continued to use the printer, the black specks appeared in greater profusion. Black streaks mysteriously appeared on my desk, my chair, my clothing, the carpet in my office, as the almost invisible specks were rubbed, crushed, or walked on. I trashed a shirt. In great anguish I pulled the 1027 from my system and peered into its innards.

Like so many grains of pepper, the specks were everywhere. Black streaks appeared on the upper

white plastic case wherever my fingers touched it. My 1027 was a mess. I operated the printer and watched it run. As the print head spun the roller, tiny bits of the spongy ink-soaked roller material were flung off in every direction. I couldn't believe it. I removed the roller and gently scratched it with my pinkie fingernail. With almost no effort a big swatch of spongy black mess migrated from the roller to the end of my finger.

The roller was disintegrating. The flecks were spread on paper removed from the printer. Sometimes the flecks fell off the paper upon removal from the printer, or the paper bearing the specks came into contact with other objects. The tiny particles could lie dormant for a long time and still deliver their nasty load of indelible ink upon physical contact months later.

Defective Roller Saga

Mystery solved, I spent hours cleaning the printer and everything in its vicinity. Q-tips, alcohol, and 409 cleaner did the job. I installed a fresh roller. Thank goodness, it was OK. For a few days. Then the mess started up all over again. I tried a fourth roller. It also disintegrated. My colleagues at work got used to seeing me clean my printer. They also heard some novel expletives. All the spare rollers I had purchased were defective.

It was too much. I called B&C to explain my problem and received a now-familiar response: "We've sold hundreds of these (fill in the blank) items, and you are the only one who ever complained." Checking my frustration, I pressed my case. A more mature voice came on the line and said, well yes, actually there HAD been a few complaints about those rollers. B&C offered to exchange the defectives for new ones. Were the new ones from the same batch as the defectives? Yep. Nix to that. B&C offered to refund my money on the one remaining roller. Two dollars in postage to ship a 3-dollar item from Pennsylvania to California for a refund. Nice gesture, but it was time to tuck my tail between my legs and accept defeat. It was absurd, some weird kind of dream.

Despondent, I called Atari customer service, got hold of a cheerful-sounding fellow and mentioned I had problems with 1027 ink rollers. The response was instant: "Oh yeah, they come to pieces, right? We had a bad batch. Be glad to replace them for you, no charge. How many you need?" So! Atari knew all about it! Free replacements! Atari on my side! Hot dang, things were looking up.

A week later a package from Atari arrived. Five new 1027 rollers. I tried one. It worked great, for three weeks, and then it disintegrated. I ran out of expletives and fell back to primal screams. Atari's replacements were all defective.

Apparently, B&C and Atari (and everybody else who sold these things) all obtained product from the same supplier (whoever that was). In rollers sold to the replacement market, the manufacturer changed the formulation of the absorbent material that holds the ink. Replacement units have slightly different packaging, and the absorbent material is of a coarser texture compared to rollers originally provided with new 1027's. The new absorbent is chemically incompatible with some component of the ink, and chemical degradation of the spongy material occurs in storage. The Alchemist verified this theory over a period of months: the longer the rollers are stored, the lousier they are. They decompose right in the package.

If you are suspicious of a roller, try the fingernail test. If you can easily scoop out a wad of inky absorbent, it's defective. The original rollers were made of very resilient microcell foam rubber. Tearing or scraping one of those with a fingernail requires a determined effort. Another characteristic of defective rollers is their lack of resilience. The absorbent compresses easily, doesn't "bounce back", develops grooves within a few days or weeks of use, and causes letters with circular shapes to print as solid blots. I fired off a letter to *Analog* about it. But *Analog* had problems of its own.

Whither 1027?

Nine months after Atari shipped my defective rollers, Atari announced its decision to withdraw from the 8-bit market. It is possible during that period Atari received another lot of good rollers (but somehow I doubt it). Having gone through ten defectives in one year I got fed up with replacements and turned my attention to reviving the used ones I had squirreled away.

After many experiments (and much failure), I hit upon a scheme that will further extend the life of an original roller. On the portion of the roller hood that faces the print wheel is a small lip that runs the width of the hood. Removal of the lip, plus an extra millimeter of plastic, permits the roller to settle down further and maintain contact with the print wheel. A sharp X-Acto knife will do the job. Placing several layers of vinyl tape on the back side of the hood will further increase the tension of the roller against the print wheel.

These are last-ditch efforts. Eventually, the grooves will wear so deep no amount of pressure will suffice to keep the roller in contact with the print wheel. On that day my 1027 will become worthless junk. So will yours. If you discarded the original rollers when they ran dry, you have probably already written the death warrant for your 1027. Unless somebody comes up with a reliable replacement roller, the 1027 is a doomed piece of hardware. A real pity, it's such a nice little printer. Just sold by the wrong company.

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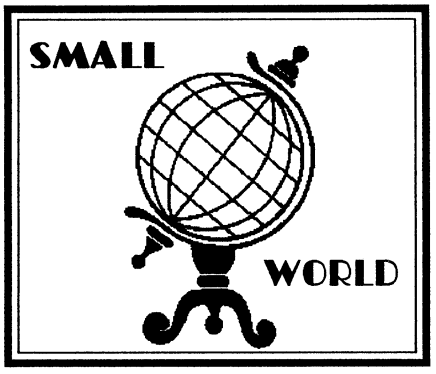

68030 SST Accelerator and Lots About The ST, Part 1

by David Small, (C) 1991, All Rights Reserved

Author's Note

THIS IS NOT AN ARTICLE JUST ABOUT THE 68030. I have given a GREAT deal of information about the ST, in general, that I feel an owner will be interested in, and it'll improve your knowledge of your ST to read it, even if you could not care less about the 68030.

Editor's Note

[The amout of information in this "article" is, in fact, too much to fit into the space available in a single CN issue. I have divided it, therefore, into several parts. This first part covers the details of video scanning. Later parts will discuss video memory, its impact on the CPU, and the 68030 solution. –JW]

Introduction

It's been a long time coming, hasn't it? But it's finally here! We're taking orders for our supercharged 68030 accelerator, called the SST, a product that will enable you to blow most computers into the weeds with your humble ST. (How fast? Get this: The ONLY computer Apple sells that's faster is their $10,000 Mac IIfx.) And we've set the price where most people can afford it, which is not something other computer companies are noted for.

A tad of history: In December 1989 I held an on-line conference on GEnie to discuss whether or not I should do a 68030 accelerator board for the ST; the consensus was, "YES!"

Now look, this is market-testing for us. Some computer manufacturers approach the market by saying, "We are going to build Product Z, then try to convince you to buy it." At Gadgets, we have another approach; we ask FIRST if you'd like a product, and if so, we go for it. For instance, I held an online conference asking if anyone wanted a 128K ROM Mac emulator, and was really surprised by how many "Yes!" replies there were; that led directly to Spectre 128 and Spectre GCR. The decision was largely made that very night.

There were some unexpected snags in the development process; our original board designer, Jim Allen, and ourselves parted ways in June. We then went to George Richardson, who had designed MegaTalk for us, and he worked so fast that we showed the final 68030 board design at the WAACE show last fall. That is superb for a hardware R&D project. Now we're ramping up into the "build 'em, Danno" phase; it's just a million little details to get done (what connectors to use, what supply house gives the best price and credit terms, and so forth). My wife Sandy, "Predator III" when it comes to Raving Idiot Chip Supply places, handles that.

We've sent out a newsletter to Gadgets customers (primarily GCR owners) announcing the "SST," as we call the board, and our FAX machine and mail have been *flooded*. I don't know about you, but I feel the faintest twinge of anxiety at getting a stack of mail two feet high every day--and that's been going on for a couple weeks now, what with orders for Spectre 3.0, MegaTalk, and SST. It takes hours just to open the day's mail, and every morning, the floor is littered with FAXes from Europe (where it was daytime during our night) and the FAX tray overflowed. I hate to tell you what it's like having an inch-thick stack of FAXes.

It makes me feel that the ST isn't as dead as the doom-and-gloomers think, for many people are willing to shell out the money to make their ST fly *fast*. If they were tossing their ST in a closet, we wouldn't be seeing orders; nor would we see orders if they were buying an IBM clone or an Amiga. (As for buying a Mac, grin, I think we have that covered with GCR.)

And we've just run some benchmarks in which an ST simply wasted a Mac IIci--the second highest performance Mac that there is. The only things Apple has faster than an Atari ST equipped with a GCR and 33 Mhz SST, according to the Mac "Speedometer" benchmark, are a Mac IIfx (40 Mhz and around $10,000), and their Cray computer (grin).

Yes, we feel a little stunned at the intensity of the response, but to borrow a term from the past, it appears there is a large silent majority of ST owners who feel that their machine is perfectly fine, thank you, and just want to keep it up to date in speed and memory size (which add up to capabilities). I saw a similar reaction to the "No Gloom Zone" article, and I frankly think many of the Atari Pundits claiming doom are flat wrong.

Want to Hear More?

I thought you might be interested in how the board works and why we designed it the way we did, and that's what this article is about. It's a "look behind the scenes" at how we think here at Gadgets.

Want to Learn More?

Let me be clear on one thing. This is not intended as a review or a sales pitch! I'm going to talk about a whole bunch of stuff that is useful to know for ANY computer, and for the Atari in particular. Only after I've

laid that groundwork can I talk about why the SST runs so fast--and by that time, you're going to know some darn useful stuff. Sound like a deal? I'll feel good if you come away from this article feeling that you know a little more about your Atari.

First, I'd like to tell you why the Atari is sort of slow by today's standards (certainly it was a screamer by 1985 standards, when it came out, but computers have sped up relentlessly in the last six years). This directly affects our design, because we have to overcome that slowness to get raw speed. Then, I'll tell you a bit more about the SST and its abilities. Finally, depending on how much Sandy lets me say, I'll tell you a few dreams I have for this board, for we certainly are not done yet!!

The Least-Known Secret of Computers: Video Is a Bitch

Imagine turning on your ST. In a bit the "desktop" pops up, and the machine sits there showing it to you. Since nothing *appears* to be happening, most people think the machine is not doing anything.

This is just illusion. In reality, the machine is working its heart out--and if anything goes wrong with that full-out effort, your machine crashes (the "bombs" on the screen, or "locks up" where the machine freezes).

What you are seeing in that screen is something close to a miracle, and I'd like to tell you why.

The Big Picture

Let's take a monochrome display because that's easiest to explain. The part of the picture tube of the monitor TV that you can see is plain old glass with a weird material ("phosphor") painted on its inside, the side facing you. Phosphor has a strange property: If you shoot electrons at it, it glows while the electrons are hitting it. When the electrons cut off, so does the phosphor, and pretty fast--about 1/30th of a second, but that number varies. If you'll think of radar displays you've seen on TV or movies, with a circular line sweeping around, and where a "dot" is painted onscreen and fades, well, that's a perfect example of a phosphor fading, which needs to be repainted now and then.

There's also an "electron gun" at the back of the picture tube. As you would imagine, it fires electrons! It's in the skinny back part of the TV tube; yes, the ST monitor looks inside like any TV picture tube, with a skinny back and a wide front, like a champagne glass on its side.

Break for Trivia: In order to fire electrons, we use very very high electrical pressure (called "voltage"). This is generated by a "flyback transformer," which is that very high, irritating whine you sometimes hear from TV's or computer monitors. The best hacker that ever was, Nikola Tesla, invented the principles of that trans-

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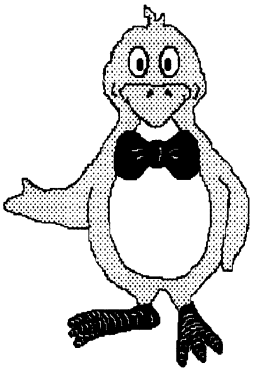

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former; Tesla lives on in every TV and monitor today.

The Dot

Back to business. Now, let's create a computer picture (display) with this setup. We set up some things to allow you to aim the electron beam coming out the electron gun ("deflection plates"), and we point the beam at the upper left hand corner of the display. We kick on the beam, and wow!, you've got *exactly* one tiny glowing dot at the upper left hand corner of the screen. It is the size of the tiniest dot you have ever seen on an ST display. That beam is tiny!

Well, that's *something*, true, but no one is going to buy it ("The Dot Computer," I can just see it). So, let's tell the deflection plates to move that dot to the right. You see the dot "sweeping" across the picture tube in front of you; eventually it reaches the right hand edge. As the dot goes by, the phosphor lights up, then it fades away as the dot moves on. Okay, that's cool. We reach the right edge; we have just painted a "scan line," which is just one horizontal line.

Now, let's kick off the electron gun; the dot disappears. Move the aiming point back to the left side, with the electron gun off (so we don't paint junk on the screen while it moves back), move the aim one row down, (oh, about 1/32 inch?), turn the gun back on, and sweep across again for another scan line.

The time the beam is off, as the gun goes from right back to left invisibly, is called "Horizontal Blank," by the way. You can impress people that you're a techno-whiz if you'll just use some of the words I'm telling you about at computer group meetings. (Don't laugh, consultants do it all the time for money. Hmmm, come to think of it, I'm a consultant!)

So, we have swept the beam across the display, left to right, and returned it to the left one line down. Continue this for 400 lines! At the end of the 400th line, we're at the bottom right of the display. We've just done one "screen refresh"; in other words, we've "painted" the entire surface of the TV screen with the electron beam. Now remember, and this is important--that screen doesn't *stay* painted, it just briefly lights up as the electron beam forces the phosphor to glow. (Incidentally, no, the phosphor glowing is not radioactive nor dangerous to you.)

To complete the process, we turn the gun off, point it to the upper left top of the screen where we started, and start all over. The process of returning to the top is called "Vertical Blank" (VBL). Programmers use VBL all the time.

On a monochrome monitor, it takes right around 1/70th of a second to do this entire process. This may not seem like much to you, but let's think about what just happened. Let's arbitrarily say the display is a foot wide (that's close enough). There are 400 "scan lines," so we just "painted" 400 feet with that electron beam in 1/70th of a second!

Well, all we have to show for our efforts is a screen that briefly lights up, as every location on it is hit by the electron beam. It lights up for only a small fraction of a second. Well, Woof! (That's computer slang for, "Big Deal. Hmmmph.") We want information on the screen, not just a quick flash of white screen!

Varying the Dot: A Picture!

To get information out there, we vary the strength of the electron beam. To get a "black" dot, we crank it down; to get a lit-up white dot, we turn it up to full power. The people who designed the ST arbitrarily decided there would be 640 places to turn the beam on or off on each "scan line" going across; those places are called "pixels." You've seen a pixel; it's an individual dot on the computer screen, very small.

Now if you look very closely at your monitor, you will see that everything on there is created out of these small dots! The "icons" are just patterns of dots; the "background grey" of the desktop is just a pattern of on-and-off dots, and so forth. If your monitor is a little out of tune and fuzzy, it'll be harder to see; try a "painting" program, draw a narrow diagonal line, and you will easily see the "stair steps" or "jaggies" as the line climbs from one scan line to another.

Now's where it starts getting absolutely incredible. As it turns out, monitors will handle sweeping the beam back and forth and down, then up, all by themselves, without a computer, something like a TV not tuned to any channel. They're pretty relentless about it. But folks, the information to turn the beam on and off, to actually "paint" a screen with information on it, has to come from somewhere--and that somewhere is the computer. In 1/70th of a second, it has to tell the TV to turn the electron gun (and beam) on or off 640 times per line for 400 lines, or 256,000 individual decisions in just 1/70th of a second! That's cooking FAST. In terms of decisions per second, that's 256,000 X 70, or 17,920,000. Seventeen million decisions per second!

As my wife Sandy will tell you, getting two decisions per day out of me is doing pretty well...

You've seen an overview of this and not known it; think of when you turn on your ST. You click on the computer, and the monitor is told to "start going"; it mindlessly sweeps that electron gun through its pattern, over and over, without the computer telling it to vary the beam's strength. So you end up with a white screen! (In fact, if your ST ever fails to start up properly, which happens, you'll often be left looking at a boring white screen... I've seen it many times.) Then, when the ST knows what sort of picture it wants to display, and the video circuits start waking up and talking to the monitor, the monitor actually displays a picture (the desktop); that's the point when the

electron gun starts spitting out varying levels of beam, to make the picture on the screen.

... Than to Fade Away ...

(If you're puzzled by that last heading, it's from the song "Rust Never Sleeps," by Neil Young, ("better to burn out than to fade away"), and Neil is my programming music. Remind me to tell you THAT story sometime!)

Well, let's say the ST *does* manage to vary that electron beam in amazing synchronization with where the monitor has put it, and we actually paint a desktop picture, icons and all, one line at a time, with that one tiny little dot. It isn't enough. That phosphor on the screen is *determined* to fade away, too. So this painting process of tracing the screen with the electron beam, over and over and over, goes on continuously by sheer necessity. If it ever stops, your picture snaps out and the monitor goes dark in 1/70th of a second.

Optional Lab Experiment: To see how fast the phosphor goes away, just pull the monitor plug out of your ST while it is running. Zap, the picture is gone. Pretty fast, huh?

Hence, you see, the entire screen isn't sprayed out at once by that electron gun at the back of the picture tube. Rather, the tiny electron dot is swept left to right, 400 times, working its way down the screen, with varying intensity, to paint the picture.

One reason you don't perceive the image as being made of dots is that two lit-up monochrome dots tend to blur together, and a whole row of them blur nicely into a "line." You'll have to look very carefully at your monitor to distinguish individual dots.

Okay, we showed that we "paint" 400 feet with each single complete "refresh" of the screen. In 1 second, we've painted 70 total screens, or 28,000 feet: call it five miles. Let's say you sit down and work on the computer an hour. No big deal, right? (We've all done THAT many times). Your busy little electron gun has just painted 19,000 miles (!!) in that hour.

If you've had your ST on for any long-session length of time, you have easily painted *the distance from the Earth to the Moon.* Some day I've promised myself to calculate given a certain estimated number of PC's in the country and an average on-time, whether or not the electron beams have traced light-years of distance; if you feel like giving it a shot, I would be very interested in hearing from you.

Many Other Terms & Trivia

I've left out some things in the interests of getting the basic idea of video scanning across that you might be interested in. You'll see the terms I talk about here very often in ads and in computer articles written by people who assume you already know this stuff.

(Continued on page 56.)

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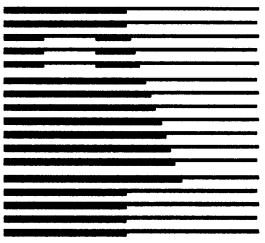
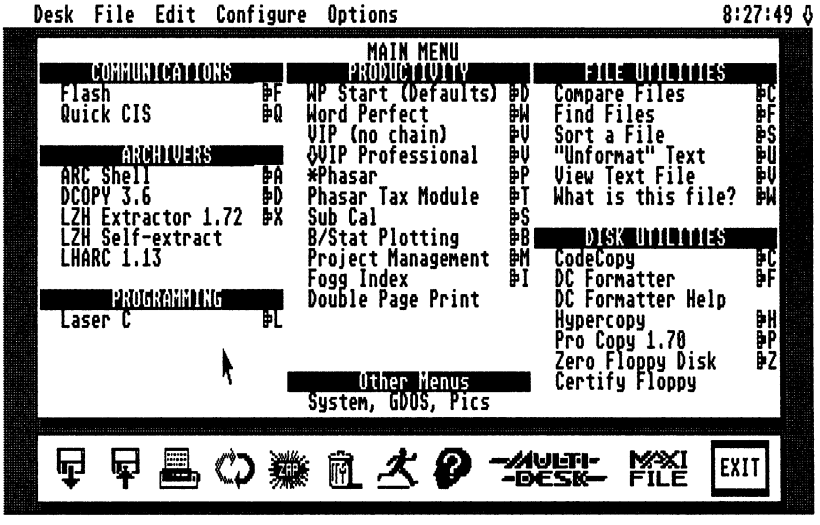
STARTING BLOCK

by Richard Gunter

HotWiring Your ST: A Tutorial





I've never really become an icon person, even after two years with my ST. For instance, I always set the "View" option on my desktop files to "Show as Text." In *HotWire* from CodeHead, I found *my* kind of desktop alternative.

What It Is

HotWire's approach is completely different from *Neodesk* and its kin. It's a generalized menu utility with more bells and whistles than you can shake a stick at. More precisely, it's a menu-oriented shell for launching your applications.

With *HotWire,* you construct a family of menus that allow you to run nearly all of your applications with a keystroke or a mouse click.

The big deal is that *you* build the menus and tailor them to *your* needs. You don't have to be a programmer or a rocket scientist for that. Nor do you have to worry about nine zillion little icons.

Touring a Menu

Let's take a nickel tour of the *HotWire* screen and my main menu (illustrated on this page) to get a feel for how this works.

The top line is a standard GEM menu bar. The **Desk** menu provides access to Desk Accessories; remaining dropdown menus control *HotWire's* menu maintenance functions and options.

At the bottom of the screen are 11 icons which operate as mouse buttons. All have keyboard equivalents (the function keys and [Return]). From left, the first two buttons govern loading and saving *HotWire* menus from disk. The third prints the current menu. The curved arrow and **zap** buttons are for editing the current menu, and the trash can erases it. The **running man** button allows you to run any program, whether it's on the current menu or not. The stylized head displays an info box, which contains some useful information about current status.

MultiDesk and *MaxiFile* buttons activate built-in interfaces with these two CodeHead products (if you have them). The **EXIT** button exits to the desktop, although *HotWire* remains loaded and running. When *HotWire* is installed from the AUTO folder, the only way to deactivate it entirely is to reboot the system.

The large rectangle is the menu area, which contains 54 slots arranged in three columns. Each slot may contain a character string (heading) or it may represent a program. I use headings to break up my menus into sections, with simple visual cues to remind myself of which is what. My headings are all centered, and most are inverted; thus, MAIN MENU, COMMUNICATIONS, etc. are just descriptive text.

The rest of the items in the menu are active; i.e, they cause something to happen. Take a look at the **Flash** entry, for instance. To the right of the title is a lazy-T arrangement of tiny boxes and the letter F. That's a reminder of the **hot key** I've chosen for *Flash*.

The tiny boxes correspond to [Control], Left [Shift], [Alternate], and Right [Shift] keys. The boxes are arranged to suggest the relative location of these keys on the keyboard.

To run *Flash*, I either left-click on its entry or simply press the letter **F** on the keyboard. Similarly, to run *ARCShell*, the key combination is [Control]+**A**. The hot keys work even if I exit to the desktop for some reason.

Notice that a few entries lack a hot key information display. This just means that I didn't bother to define a key combination for that program; the only way to run one of these from *HotWire* is to left-click on its menu entry.

A Little Fancy Stuff

The heading at the bottom center of my menu, **Other Menus**, indicates an entry that loads another menu having its own key definitions. This capability comes in really handy if you have a lot of applications, or just want to isolate some functions to keep your main menu from getting too cluttered.

Just above the center of the menu area under the **PRODUCTIVITY** heading, is an entry for *VIP Professional*, followed immediately by an entry for *Phasar*. The leftmost character of the **VIP** title is an arrow pointing down, and the **Phasar** title starts with an *. These symbols are associated with another advanced feature, which allows me to run multiple programs in succession with a single keystroke.

If I press **V**, the spreadsheet program runs, as you would expect. When I exit from the spreadsheet program, *HotWire* automatically runs *Phasar*. The chain ends at that point, so when I exit from *Phasar*, the *HotWire* menu reappears.

We've now explored the *HotWire* screen and seen how easy it is to use a menu. Now let's install *HotWire* and build a menu.

Installing HotWire

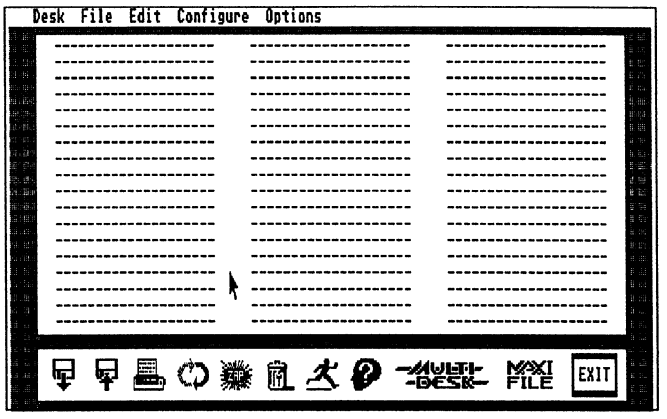
You'll have to run a registration program before doing anything else; the *HotWire* manual describes the procedure. After that, just copy the *HotWire* program to your AUTO folder. *HotWire* Version 2.3 requires about 89KB of RAM; 90780 bytes to be exact. It seems pretty tolerant about its placement (run order) in the AUTO folder; I placed it after some other programs that need to run early and just before *UIS III*.

You can use *HotWire* on floppy disks, but like most applications, it really sings on a hard drive. I use it on a few floppies as a game selector. The rest of this discussion assumes you're using a hard drive. Differences for a floppy system should be obvious.

Configuring HotWire

With *HotWire* installed in your AUTO folder, reboot the system. *HotWire* will display a message when it runs. After everything in the AUTO folder runs and the accessories are loaded, *HotWire* should present you with an empty menu, as shown at the top of this page. If it didn't, just right-click the mouse in an empty area of the desktop, or press **[Alternate]+[Help]**.

I recommend creating a folder for your menus. The folder can be anywhere, but I suggest putting it on drive C: (the boot partition). You can exit to the desktop to create the folder, or use an accessory like *UIS III*. You don't really need a separate folder, but it'll make life easier as your menu family grows.



Returning to the *HotWire* display, use the mouse pointer to open (drop) the **Options** menu; the options we're interested in at the moment are **Autostart** and **Warnings**. Make sure these are selected, i.e., there should be a check symbol next to each. Also make sure that **Ledgering** and **External Ledgering** are turned off (no check); we don't want these for now. Remaining options can be left as they are.

Autostart will cause your menu to appear after system boot is completed, and **Warnings** will let you know if you're about to lose some menu changes--handy while you're getting used to *HotWire*.

Next, open the **Configure** menu. The option we're interested in is **System Paths**. Click on this and you get a dialog box display. Click on (i.e., select) the first button to specify the path for .HOT files (menus), and use the file selector to open your menu folder. Then click on the file selector's **OK** button. If you use *MaxiFile* or *MultiDesk*, you can specify their paths with this dialog box also. For each, use the file selector to open the appropriate folder and select the program.

Return to the **Configure** menu and select **Save Configuration**; your options will be saved in the *HotWire* program itself.

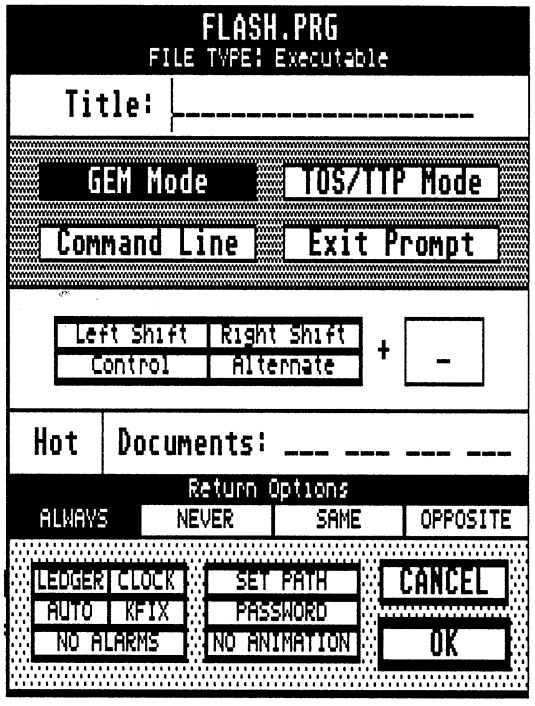
NOTE: Autostart/Warnings options are not saved in the *HotWire* program; rather, they're saved as part of each menu. We're simply setting them now so as not to forget.

Building a Menu

Left-click on one of the empty entries in the menu area. You'll immediately get a file selector box, and your first task is to select a program. The program can be in any folder anywhere on the disk; just find it as you normally would and select it, then click on the file selector's **OK** button. Now, *HotWire* knows which program you want associated with the menu entry.

Immediately after the file selector box closes, *HotWire* displays its **Options** box (shown on the next page), a complicated-looking dialog box which lets you set up a number of options pertaining to the

application. In the illustration, I've selected *Flash*, whose file name appears at the very top of the dialog box. You should use some GEM application if you're following along with me.



There's a thin vertical cursor positioned at the left of the Title line, where you can enter a descriptive title of up to 20 characters. If you enter nothing here, the program's file name is used as the title.

Since we're working on a GEM application, the GEM Mode button is already highlighted, so leave that section of the dialog alone. Just below this area is a place to type the letter that you want to use as a hot key for the program. Using the mouse, position the cursor in that small box (the one after the + sign) and press **F** or **f**. All letters are forced to upper case. The four buttons to the left of the + sign are used to specify the rest of your hot key combination.

The **Hot** and **Documents** sections of the dialog we'll skip.

The **Return Options** section lets you specify whether *HotWire* is to display the menu after leaving the application, and the meanings of the four buttons are pretty obvious. I usually use **SAME**, which simply means that *HotWire* is to return either to the desktop display or to the menu, depending on where I pressed the hot key combination for *Flash*.

At the bottom left of the options box are eight buttons, most of which I don't use--the manual explains what they're for. The **CLOCK** button I do use, however, and it's worth discussing briefly.

I normally configure *HotWire* to display the corner clock and caps lock indicator, but for some applications I don't want the clock on the screen. *Flash*, for example, has its own clock display, and slide shows don't look too good with a clock flashing in the corner. A left-click on the **CLOCK** option, (making it appear in inverse video) will cause the clock to be displayed while the application runs. Click on the button again to toggle it off and suppress the clock display. Naturally, this setting matters only if the clock display is enabled (**Clock Display** in the **Options** menu).

Now that we're finished with all the options for our first program, just click on "OK" or press [Return]. The options dialog disappears, and the program's title is displayed on the menu.

Repeat this process for each program you want on the menu. When you've set up a few entries, save your menu and test it as follows.

Saving and Loading Menus

When *HotWire* runs, it looks for a menu to load. If you haven't specified a default folder, *HotWire* will look in the root directory of your boot drive (for a hard drive, that's usually C:). What it's looking for is a file named HOTWIRE0.HOT, and if that one isn't present, it looks for a file named HOTWIRE.HOT.

Save your newly created menu as HOTWIRE0.HOT in your menu folder.

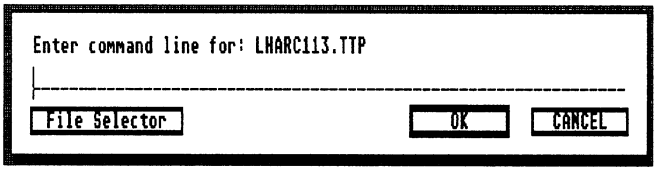
Test your new menu by rebooting the system. Did your menu appear automatically? If you're at the desktop, press right [Shift]+[Help] or do a right-click with the mouse in an empty area. The *HotWire* screen should appear, displaying your menu. To make this happen automatically, use the mouse to select **Autostart** from the **Options** dropdown menu and save the menu again. Also check the .HOT paths entry in the **Configure** dropdown menu.

TTP Programs

A TTP (TOS Takes Parameters) program is defined to *HotWire* in the same way as a GEM application. However, the options box appears with a slightly different set of options highlighted; namely, **TOS/TTP Mode** and **Command Line**. You can also select the **Exit Prompt** option to force a pause at the end of the program. This prevents the last messages from the application from disappearing too quickly to read.

When you run a TTP program from the desktop, TOS displays a dialog box that allows you to enter a parameter string for the program. The ARC programs are good examples of this sort of thing.

HotWire uses a different parameter box, as shown. The command line is wider, and there's an extra button on the left. Yep, you can use the file selector to help you build the command line, eliminating the need to

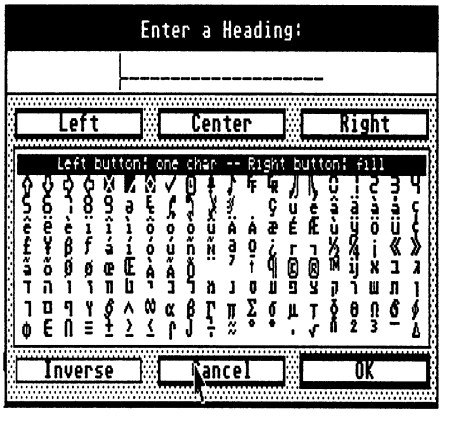


remember those pesky paths. You can type all of the command line, or part of it, leave any necessary spaces, and click on the File Selector button to insert a complete pathname for a file. Typing and File Selector can be intermingled, and you can edit the command line at any time, then run the program by hitting [Return] or clicking on "OK". Nice.

HotWire remembers the last command line you used (for all TTP programs on the current menu), and will save this information with the menu. Just remember to save before rebooting or loading another menu.

Headings

Right-click on a text entry (heading) or empty slot, and you'll get a weird-looking dialog box (shown). It has a 20-character field in which you type a character string, and a section which displays a raft of possible characters to enter by mouse. This dialog allows you to create separators and headings for sections of your menu. Text can be justified, centered, and/or displayed as inverse characters.



An empty slot displays as a string of hyphens, which I find unappealing. When I'm finished with building a menu, I usually make the empty slots text entries filled with blanks. To change a text entry to a program entry or vice versa, just **Zap** it, then create the new entry as above.

Editing a Menu

You can alter the current menu from the *HotWire* screen. Thus, you can rearrange it and add, delete, or alter entries whenever you like. The **Zap** button is for deleting entries. Left-click on **Zap** and the mouse pointer changes to an X-shaped symbol. Left-click on an entry you've created, and it will be deleted from the menu (there's a "do you really mean it" prompt as a safeguard). Left-click on **Zap** again to return the mouse pointer to its normal arrow shape.

The curved arrow button next to **Zap** is used for rearranging entries on the menu. Click on this one, and the mouse pointer changes to a stylized hand. To move an entry, place the pointer over it, hold the left button down, and drag the entry to its new location. Other entries will be moved up to fill the hole. Experiment with this option to get the feel of it.

Right-click on a program entry, and the **Options** dialog is displayed. This works just like it did before, and allows you to change anything you like. If you've moved the program to another folder, you tell *HotWire* about it by clicking on the "Set Path" button to bring up the file selector box. It's not necessary to delete the entire entry and start over.

The **File** dropdown menu contains options that allow you to save/load blocks of contiguous menu slots. Usage is pretty straightforward; select the option, mark the first and last of a block of entries. A file selector box appears to save the block as a file. Alert boxes prompt you through the procedure. Loading a block is equally simple. Block editing is most useful when you're breaking up a menu into multiple smaller ones.

AutoStarting a Program

Remember that Autostart selection in *HotWire's* Options menu? And the **AUTO** button in the Options dialog box? Together these two options can be used to make a GEM program run automatically. Here's how.

First, this only works on your main menu (HOTWIRE0.HOT or HOTWIRE.HOT), and only on a system boot, which is where you want it anyway, right?

You've probably already turned on the Autostart option for the menu, but check it anyway. Next, right-click on the menu entry for the program you want to run. Click on the **AUTO** then **OK** buttons. You'll get an alert box warning that you need to save the menu again. Do so.

On your next system boot, the application will be executed automatically. Only one program can be autostarted, but you can use *HotWire's* chaining feature to make a series of programs run automatically.

Chaining Programs

Making a chain of programs like my *VIP/PHASAR* combination is simple. First, make sure that all programs in the chain are contiguous on your menu. Right-click on one of them to bring up the Options box. Now position the cursor at the extreme left of the title and press **[Control]+A** to insert an up arrow; **[Control]+B** for a downward pointing arrow. Use an * to mark the end of the chain. The documentation explains all this in detail.

Run any program in a chain to initiate the whole chain or a portion of it. Terminate chain processing by pressing right **[Shift]+[Undo]** as you leave an application--you'll have to act quickly...

Next time, we'll explore additional features of *HotWire,* including installed applications and the interface with *MaxiFile.*

The Junkyard Pussycat

by John Barnes

Online in Offbeat Places

Over the last several months the Junkyard Pussycat has devoted extra ink to discussing online information services. The Pussycat finds these places interesting because he is addicted to scratching around among odds and ends of loose recyclable material. Information support for users of Atari's computer products is shrinking as magazines and dealerships disappear. The electronic information media may stave off a complete information famine, at least for a while.

In the Pussycat's eyes, the online services serve four main functions: 1) news, 2) reference, 3) applications, and 4) socializing. Different services have their strengths in different areas. The services also differ in the way that they organize their data. The people who manage the special interest areas (the "Sysops") are a crucial ingredient because they help set the tone. The customers are also important because they provide most of the content through their message postings and file uploads.

Delphi

As Reported under "fare wars" in the October *Current Notes*, General Videotex Corporation has been pushing its Delphi service. A special plan named "20/20 Advantage" gives the user up to 20 hours per month of connect time at a special $20 flat fee. Each hour beyond 20 costs $1.20. DELPHI's standard rates are $5.95 for 0 to 1 hours per month and $6 for each additional hour. Some users will need to add network connect charges to access the service. While $20 seems like a lot of money, any determined GEnie or (especially) Compuserve user can run up bills like that with no trouble at all. Delphi has been running full page ads in *Current Notes* since at least May, mainly under the theme, "a hard drive is a terrible thing to waste."

Delphi is a full service information exchange with a wide range of products, running the gamut from travel information, business services, encyclopedias, online games, and shopping to the special interest groups, including those for the Atari 8 bits and the Atari ST. The services offered by Delphi are nicely described in a 300 page paperback book entitled "DELPHI The Official Guide," which can be ordered online ($19.95 plus $3 shipping, with several special deals thrown in).

Clayton Walnum is the principal sysop, with assistance from Charles Bachand, and Gordie Meyer. DELPHI, like the other online services, does not like to give out membership numbers, but there were about thirty active message writers on the ST forum in a recent week. The ST Report file for 21 December was downloaded by about 85 people within 10 days, which is about 1/5 to 1/6 the number of downloads reported on GEnie, which implies that DELPHI's ST sig is much smaller than GEnie's. A figure of around 600 might be a good guess for the number of people who log on at least once per month.

Message traffic on the 8-bit sig was running at about 20 per week recently while the ST Sig was managing about 140 messages per week.

The computer groups all seem to have messaging, file retrieval, and realtime conferencing facilities. The Atari SIGs do not have any "official" Atari Corporation support, which keeps the message traffic down somewhat as the developers and other techies tend to conduct their business on GEnie, where Atari employees are plentiful.

Membership on DELPHI plummeted when ANALOG and ST Log ceased publication, but the advertising campaign and the 20/20 Advantage program have led to reasonable increases in membership recently.

Tangled Threads

The message areas (or "forums") resemble those on local BBS systems in that they are organized as "threads." Messages are posted chronologically, with only a minor attempt to segregate them into topics. The threads tend to veer off the track rather quickly, so that message labels in a condensed listing of the traffic are largely meaningless. DELPHI is not the place to look for a coherent report of information on a specialized topic, and its utility as a source of reference information must, therefore, be judged as minimal.

Direct queries to knowledgeable users do, however, get pretty good replies.

DELPHI permits the use of "handles." These allow users to indulge their fantasies, but they tend to detract from a businesslike aura. MADMODIFIER, KAMIKAZE ACE, or CLUBOWNER don't provide much indication of the quality of the information being presented. There is, however, a nice online membership directory that provides further information about those users who have chosen to enter their profiles. With such a small community, the banter tends to get pretty relaxed.

DELPHI gets good marks as a place to socialize.

The File Library

DELPHI stacks up better in the file arena. A tally of files posted between 15 and 30 December revealed about 80 new files. These cover the usual range of applications, news, and "for sale" announcements.

New files reside in the "Recent Arrivals" area until they can be assigned to one of the other "databases."

These other databases are rigidly compartmentalized, so that each must be visited in turn in order to get a comprehensive listing. The abbreviated file descriptions are often too terse to be of practical value, and the user must look at the more detailed abstracts.

DELPHI is unusual in that it supports KERMIT as a download protocol. The other classics are there, also, but Zmodem seems to be the preferred protocol (as it is on GEnie) because of its speed and error recovery. It took the Pussycat a while to find a good version of the Zmodem protocol that could be embedded within Flash, but it all seems quite smooth now.

At the low hourly rates for 20/20 Advantage users it appears that files are DELPHI's strong suit. There are several active uploaders who are quite conscientious about putting up new material, so that the selection is pretty decent. User group librarians may want to check this out.

Conferencing

Real time conference activity has been weak everywhere lately, perhaps because of the holidays, perhaps because Atari developers are keeping a low profile these days. DELPHI's online conferences are much like those on GEnie, but the low hourly rate is something of an advantage here. The drawback is that there are fewer "personalities" to stir things up.

No Aids to Navigation

DELPHI lacks an equivalent to GEnie's Aladdin program or to Compuserve's CIM series. This means that all business must be transacted on line and text captures from mail and messaging must be pruned by hand to extract the gold from the dross. This has to be viewed as a real drawback.

The Bottom Line on DELPHI

In summary, DELPHI is a reasonable alternative online information service for someone who is willing to spend 20 bucks per month for a good dose of file downloading and communication with others in the user community. It will not fill all of the needs of a serious Atari user because it lacks the solid core of technical information that is available on GEnie. The spirit, however, is lively and it is possible for an ordinary observer to keep up with the message traffic.

Fido Net for Atarians

There are several alternative subcultures that allow Atari users around the nation to share information experience across their telephone lines. At the professional level we have Usenet and the Internet, which deliver newsletters into subscribers' electronic mailboxes on their machines at the office. Hobbyist users can get similar benefits from FNet or Fido Net. The former is created by Forem ST bulletin board sysops who pass message traffic to one another. The Fido Net is somewhat similar, but it is dominated by MS-DOS systems.

David Pollette, formerly of Springfield, MA, currently of Germantown, MD, has set up a nice Fido Net node with an Atari flavor. It is called CIBBS, for Creative Images Bulletin Board System. Creative Images is a collection of small software programs that David authored before he changed jobs and moved.

CIBBS echoes Fido Net traffic for several ST related message groups, and it is interesting to watch people from all over the country chat with one other. A quick look through a small sample of the traffic turned up some names that were familiar from GEnie and DELPHI.

Try calling 301-916-4462 to register. If enough *Current Notes* users request it we will try to compile a list of Fido Net nodes in other parts of the country. Right now the Pussycat is looking for a solid FNet node that is a local phone call away from Montgomery County, MD.

One problem that exists with all of this is that QuickBBS and Forem ST, the BBS software for Fido Net and FNet respectively, do not support multiple modem lines. Getting onto a popular board becomes, therefore, a hit or miss proposition. The outgoing message traffic is routed to the next node up the ladder about once per day, so there is a fair latency between message and reply.

FanTeksy Island

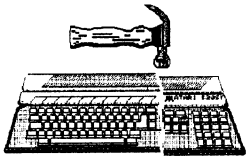
For those who really want to share their fantasies with others a group named FanTek has opened a multiline BBS running Nite Lite software over in Oxon Hill, MD. FanTek sponsors two science fiction conventions per year: EveCon around New Year's Eve, and Castle Con around the 4th of July. Their new BBS allows them to share their silliness all year round.

One interesting item is an ongoing "story" that everyone is free to add onto.

FanTek BBS encourages the use of handles, many of which are reinforced by the roles their holders play when they appear live and in costume at the conventions. Membership in the FanTek BBS is $10 per year. They can be reached at 301-203-9582.

A Bumble by a Baby Bell

Bell Atlantic's Intelligate service, mentioned in the December 1990 *Current Notes*, turns out to be something that modem users can live without. There are simply not enough gateways to allow people to get on without a long distance call. Many of the services offered are very pricey indeed, costing up to $1 per minute. Those that are cheap do not hold much interest. National services, such as DELPHI, that are available by this route can usually be reached more easily in some other way. Enough said.



Play It Again, Joe!

Digging in for the Winter in Atariland

Since last October I have received quite a lot of mail (at least seven pieces) regarding the "Sad, Sad World of PC Clones," a short article I wrote for the 1990 WAACE AtariFest program. Some people have asked for permission to upload it to local bulletin boards (granted, if anyone cares!), some just heard about it and asked whether it would be reprinted in *Current Notes*. Well, here we are; our kind Publisher decided to run it in this issue (page 42).

Writing this kind of a story for an Atari-dedicated affair is easy. All the readers would know the ST, and if you know the ST, you *know* it is better than any PC clone, regardless of how fast the latter may be or how much (mostly unusable) memory it may have. In other words, it is like writing a story on the superiority of Christmas over Easter (to follow a common Polish saying). Downhill.

Since the Fest, I have been using my dreadful PC clone at work for another four months. Oh, well, I have learned more about *Windows 3* and how to work around the moronic DOS memory limitations, but the statements I have made in the "Sad, Sad World" (as understated as they might be) are still valid.

Digging In

We do not know how Atari will fare this year. Extrapolating their previous performance, one may expect anything from very bad to disastrous. The market seems to be shrinking and the new models may not be able to revive it, if they are not supported by a reasonable marketing effort (well, *any* marketing effort!). Should that make us consider switching to another machine? Come on! Our STs (to say nothing about Mega STEs and TTs, when, and if, they arrive on these shores) will be good for years to come! At least until someone else gives us a choice better than between the PC and Mac. I am digging in.

Those of our friends and co-enthusiasts who decided to switch to PC-clones--good luck! I understand your frustration, but only now you are going to feel really miserable. One day you may come back. Bring some beer.

GNU C++ for the ST?

Now, the good news. The Free Software Foundation (FSF, a group of dedicated enthusiasts/professionals) came up with the ST version of the *GNU C++*. At long last, a modern programming language for our machine. And like some other best things in the world (let me skip the listing--Joyce would never let it slip through into a family magazine), it is free--although a reasonable donation will help in keeping the FSF afloat.

I do not have the compiler yet: downloading of three megabytes of files from CompuServe is a serious task. The accompanying note says that the system requires two megabytes of memory and a hard drive.

Last weekend I drove to my friendly Atari dealer and spent $300 upgrading my 1040ST to 2.5 Mb. The job took Mr. Lynton an hour or slightly more, and the expansion board from Zubair Interfaces seems to work just fine. All tests supplied by Zubair show A-OK, and my *Calamus* can now load all the fonts I need (so I may finally learn how to navigate around this program, which can be briefly described as "power at a price.") The only problem I have yet experienced is that my *Chaos Strikes Back* bombed twice on the upgraded machine--it never has happened before.

Still, mine is a 2.5 Meg machine now, as opposed to the PC clone I'm using at work, with 640k of memory available (and the remaining three megabytes in chips just sitting idle). If the GNU C++ is any good, the next step will be to get rid of that crippled idiot on my desk (my boss will take it for himself, the poor man does not know any better--but what would you expect from a man who hired me?) and to get a TT instead (if and when it is available; if not, even an ST will do). Welcome back to the civilized world!

Prospero Scaling Down U.S. Operations?

Prospero Software from Britain is my favorite language supplier. I have been using their *Pascal*, *C* and *Fortran* for five years or so. My recent call to their user support got me, however, slightly worried. Looks like they are cutting down on their North American operations. Still, they are doing it in a very considerate way. Prospero U.S. is still providing the user support (including, but not limited to, program updates), while the distribution is handled by Pacific Software (hopefully, your dealer has their address).

If you have been reading Atari news recently, you might have noticed the difference between this and another, more common, approach. Some other companies start by going underground, disconnecting the telephones, and leaving no forwarding address.

By the way, *Prospero Fortran* and *Pascal* are now in Version 2.153 and *C* in 1.144. Their new address is

196 Golder Road, Lewiston, ME 04240, and phone (support line, no orders) 207–777–5534. By the way, I do not quite understand why they wouldn't take orders as well.

DC Area ProgrammingClass

Some local groups associated with AURA are organizing a programming seminar starting this February. I was invited to teach it (or rather to help the participants to teach themselves), and I hope we will have some fun. If you are interested, contact Robert Griswald at 301–441–8581 (evenings) or log into the Tangent Line BBS at 301–604–4065, where the kind Sysop allocated a separate SIG area (Seminar, No.9).

The class will be taught in Pascal (with the Prospero compiler highly recommended but not absolutely necessary), but the subject will be *programming*, not Pascal, and excursions into other languages are planned. The language is just a tool, and I do not believe in terms like *C programmer* or *Pascal programmer*–-either you are a *programmer* (and then you can switch between languages with ease) or not (and then God have mercy upon you). We are planning to meet every three weeks or so somewhere between Northern DC and Laurel. No, finger food is not provided.

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Dealer Inquiries Welcomed

Yeah, Well - The World's a Weird Place

(c) 1991 David C. Troy

Hi

This article orignally started with a short commentary on the conflict in the middle east. I've decided to omit it. After today (January 12th--when Congress voted to give Bush free reign), I'm unsure what my opinion is. It is sufficient to say that I thought a year of sanctions is better than a day of war. Now I'm not so sure. Plus, by the time this is printed, we should have a much clearer idea of what the situation is over there, and anything I could say would be idle, tested speculation. So why waste space?

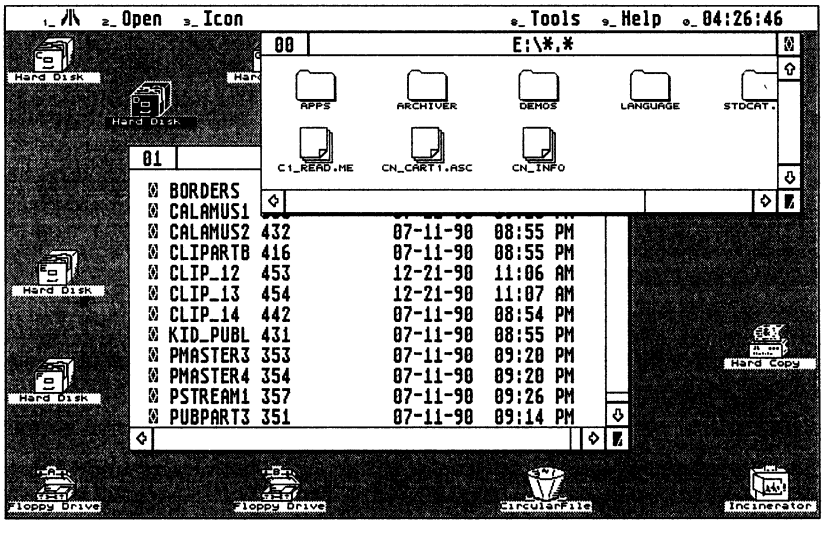
A Quick Look at Slicctop

When *Slicctop*, a recent entry into the alternative desktop market, claimed to be multitasking, many folks were excited.

Neat! A way to run a database and a terminal program at the same time. Well, not really.

Neat! A way to use the desktop from within any program. Well, not always.

Neat! A way to print files while within a GEM program. Well, pretty much.



This isn't a comprehensive review; it's just a quick answering of questions for those thinking of buying this product. *Slicctop* is cheaply packaged (hey--nothing wrong with frugality), in a 5.5" x 8.5" manual, bound with staples. On the front, it says, "A first step into the future of computers." On the outer shrink wrap are the afterthoughts "MULTITASKING" and "Hard Drive Required." Afterthoughts is a great way of describing those two attributes of this program, too. And *Slicctop* is accurately described as "a first step."

My biggest qualm about *Slicctop* is that the manual and the overall tone of the program are reminiscent of Arthur C. Clarke. When one sits down with the *Slicctop* manual, one may feel as if he's been carried to an alternate universe, where radical, free-thinking, liberal programmers are constantly battling the selfish, insensitive, and all-around unenlightened populous which constitutes "the rest of the programming world." Here, in this land of strife, there are reformers, trying to bring about uniformity and harmony, so that productivity and diversity can bud from within this beautiful homogenized framework. Yeah, yeah, that's great. Can't we cut back on a little of the "here's the plight of the techie" talk and just describe the program simply, completely and accurately? No one's saying that the other stuff wouldn't make a great theme for a sci-fi novel--I just don't care for manuals which evoke pity in the reader.

Slicctop primarily is a good, seemingly solid, alternative desktop. One nice feature it has is that it displays equivalent keystrokes for all possible options in drop-down menus, as well as for all possible options in dialog and alert boxes. Cancellation of certain functions is possible from the desktop. (Accidentally erase your life's work? Don't sit there while it erases all 1200 files! Stop it at 50, just by clicking on CANCEL.)

A total of 144 windows, data files, or applications can be accessed from the desktop menu bar, without having to search for them manually. (This is analogous to the feature found in *Neodesk, DC Desktop*, and the new TOS 3.0 that allows the placement of any file icon right on the desktop, which, incidentally, is not available in *Slicctop*.) It's got the ability to display different icons (20 are available) for different file types, but you can't create your own icons. It can display files as text--and you can set how many items across you want to display in any given window.

One nice feature in *Slicctop* is its hard disk backup utilities. Built into *Slicctop* is a powerful tool for backing up and restoring hard disk partitions. It can do full or partial file backups. By making use of the archive bit present in the directory structure, *Slicctop* is able to do effective file backups to diskettes, without re-copying previously backed-up, unchanged files. This means that if you have your kid's report on nuclear energy (eat that, Saddam) stored on your hard disk, and want a floppy backup, and if you don't change it after it's first written, *Slicctop* will copy it once and never again. That's kind of handy. There are programs which will do the same thing, but *Slicctop* does a nice job, and hard disk backup is a feature which is arguably a natural inclusion for the desktop.

Multitasking--back to afterthoughts--is yet another feature of *Slicctop*--sort of. From any GEM program (any program you can access desk accessories from), you can switch back into *Slicctop* and perform all desktop functions except for running another program. That's where the plight of the techie comes in. Unfortunately, many ST programs are written so that requests for system features and functions are not made through the normal channels (i.e. the operating system). They sort of "grab" things in a kleptomanic fashion. Want some memory? Grab it! Want to access the sound hardware in a game? Go for it!

You're supposed to ask the operating system if you can do these things. In a perfect world, programs would ask for these things, but because of the increases in speed and performance, not to mention the fact that it's sometimes easier to do, programmers frequently do resort to these kinds of tricks. And, all other things being equal, they work fine.

Well, for a true multitasking operating system to function properly, everything needs to be managed by the operating system. People can't be grabbing things. So, Randy Foster, the Art Clarke behind *Slicctop*, made it so that the entire Atari operating system, and whatever single program you're running within it, runs as a single task, or program. The desktop and a few other tiny programs written so the multitasking OS behind *Slicctop* approves of them, can run in addition to that mammoth program--the Atari OS.

Unfortunately, there are no "Slicctop Approved" multitaskable applications included with *Slicctop*. These applications are not programs, double-clickable from the desktop, but installable drop-down menu options accesible through a menu bar item named "Tools." To get any tools, you've got to send in your registration card (I'm just doing that now), at which point you are issued a "customization" disk that contains tools as well as menu-bar accessible help files.

The *Slicctop* manual does not indicate what tools might be available, but in order to do any serious multitasking you're going to need those tools. As is, the only multitasking you can do is copy files, delete files, or print files while you're in another program. The idea of background "file transfers" is bandied about quite a bit in the manual. Reading on, I learned that these "file transfers" are not modem file transfers, as you might think, but simply copying files from one place to another. Well, as you can see, that's of limited usefulness. I will get my customization disk and let you know how my future experiences with *Slicctop* go.

Slicctop incorporates the alternate desktop/print queue idea of *Neodesk*, the easy accessibility to DOS functions of *Universal Item Selector,* and adds some new ideas of its own. That's about all I want to say about *Slicctop* for now, but I should note that it requires a hard disk, and it tends to grab hold of it, too. At the WAACE Atarifest, Randy Foster of Sliccware wanted to try Slicctop on my Moniterm 19" screen. Well, he installed it on the machine and it wasn't until about a week after the fest that I figured out how to get it **off** my hard disk. It modifies the DESKTOP.INF file to autoload *Slicctop*. So I had to delete it *and* change my DESKTOP.INF to avoid *Slicctop*. It's easier to get in and out of *Slicctop* now that I know how it works. But I'll let y'all know how things go.

ATARI SC1435--Why Buy This?

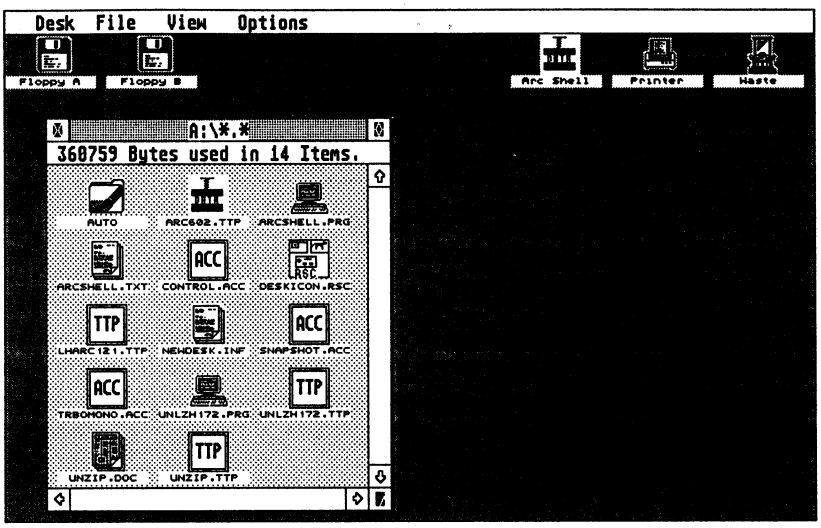
Up until fairly recently, the Magnavox 8CM515 was a nice alternative to the Atari SC1224 color monitor. It was cheaper, had a 14" screen, could accept analog RGB (ST/Amiga output), digital RGB (IBM output), as well as composite video (XL/XE output and VCR output). The screen was not always as sharp as the Atari monitor, but for the price difference and the extra versatility, the Magnavox was a strong competitor. I sold a whole lot of them.

This summer, Magnavox discontinued the 8CM515 and shortly after came out with the 1CM135--a comparable 14" replacement for the 8CM515. Well, here at our friendly store, we've been selling the Atari SC1224 as well as the 1CM135. One nice feature of the 1CM135 that was available on no other ST monitor is its ability to do stereo sound--something that makes it a natural choice for the STe. Well, I took my trusty five year old SC1224 home and put a 1CM135 on our demo STe machine. It's pretty good--stereo sound, plus the ability to sync up to European ST games and demos better (my old SC1224 had a tendency to "truncate and wiggle" (new dance step?) the bottom few scan lines of the screen). The 1CM135 also does digital RGB and composite video.

Atari came up with a new monitor recently--the SC1435. It is intended for use with the STe (and older ST's too). We got one in at the store. I thought I'd hook it up and see what it looked like. Well, upon closer examination I determined that the SC1435 and the 1CM135 are the same monitor. (Philips made the

SC1435. Philips owns Magnavox. Viola!) Save a few features.

The SC1435 uses an almost identical case to the 1CM135. The SC1435 has stereo sound ability. All the plugs, knobs, and switches are in analogous (a little RGB humor) places. There are two big differences between the SC1435 and the 1CM135. The SC1435 does not support any signal input except for analog RGB (no digital or composite). Not only that, the SC1435 costs more. I suppose we're paying for the Atari name (this seems ironic). So--moral being, buy the 1CM135 if you want a good monitor, and if you feel guilty about not supporting Atari, send them a tax-deductible donation. There is one other difference between the two: the SC1435 is grey--the 1CM135 is ivory.



Deskjet Blue Skies

In November I said that John Graper wanted to know how to print labels on the Deskjet--if regular laser labels would work. Well, I received four letters from readers who said that they'd had no problem using the Deskjet with laser labels--the most common being the Avery 2 5/8" x 15/16" labels (Avery part #5260). Avery labels 5160 and 5660 are supposed to work, too. Avery even has a "tips for the Deskjet" sheet that says this: "Place the label sheets face down in your paper tray. After printing, allow approximately three minutes for the ink to dry prior to removing any labels. For optimum print quality, use plain type. When selecting boldface type, print quality may vary. For storage, labels should lie flat in polybag in box until next usage." Mike Ostrander from Schertz, Texas recommends Chet Walters' *HP 5260 Labeler* program. Rob Monroe from Winnetka, California recommends Michael S. Young's *Jetlabel Elite* program. Both apparently do good jobs of labeling with the Deskjet.

One of the worst problems of the Deskjet that existed until just now was the fact that the ink was water soluble. This was because of the chemistry required for the printhead to work. They tried to find another ink which was a little less water soluble and not until recently did they succeed. The new HP Deskjet ink cartridges are now significantly less water soluble than the older ones. They are available now.

Rich Avey, the President of NOVATARI in Virginia, informed me of The Cartridge Connection, a place here in Maryland that sells colored Deskjet ink refills. These are not colored *cartridges*, but rather refills, and you must have an empty cartridge to fill. They sell empty cartridges. I'll list their address and phone number at the end.

TT TOS 3.01

In recent months, unofficial disk releases of "new TOS" have been floating around. First there was a 2.0 version, which many folks claimed to be bogus. Then 3.01 (which Atari does **not** endorse) became available, but in German. I have a friend who translated it to English. It looks pretty good. You can do most of the stuff I said you could do in *Slicctop*, plus a lot of other features. You might as well just read the other reviews of TT TOS to get a better feel for its features, but I thought y'all might be interested in knowing that it exists and seems to run OK on the ST, STe and Stacy.

Next Time

I'll get back to you on *Slicctop*. And I wish you luck with your Deskjet labels. And I'll answer more questions. And be wary of the SC1435, and Iraq, too.

Reaching Me:

Phone: (301) 544-6943 FAX: (301) 544-1FAX
MAIL: David Troy, 556 Baltimore Annapolis Blvd., Severna Park, MD 21146
GENIE: Toad-Serv.
CompuServe: 72470,1605
Internet: dtrojh@jhunix.hcf.jhu.edu

Relevant Folks:

Saddam Hussein, Baghdad, Iraq
Sliccware, Randy Foster, P.O. Box 2609, Kirkland, WA 98083 (206) 867-1786
Atari Corp., 1196 Borregas Ave., Sunnyvale, CA 94086 (408) 745-2000
Magnavox/Philips, P.O. Box 1597, Greeneville, TN 37744-9983
The Cartridge Connection, 1559 Rockville Pike, Rockville, MD 20852 (301) 230-0797

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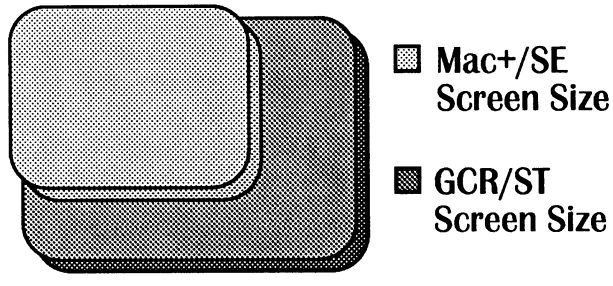
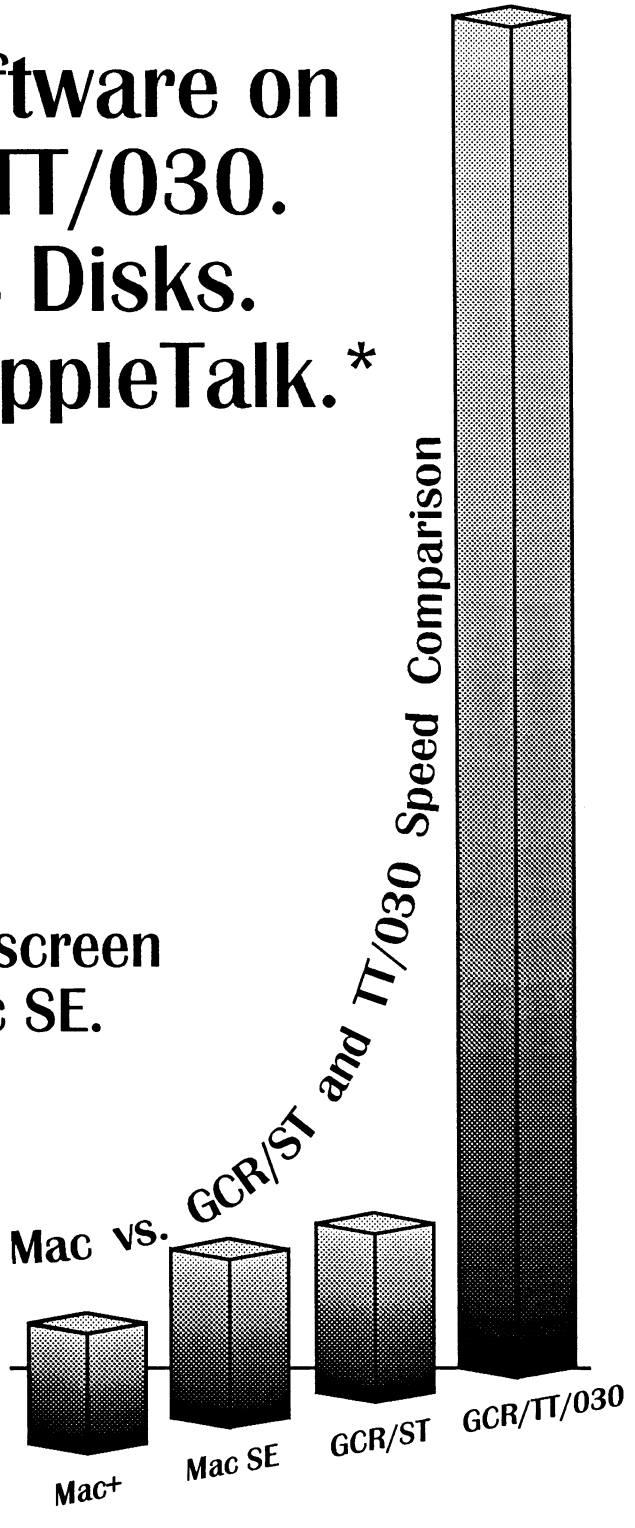


GCR has a 30% larger screen than a Mac Plus or Mac SE.



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InGEnieous Aladdin

Mitigating Wallet Upload Via On-Line Cruise Control

Review by Mike Heininger (c) 1990

Just Sit Back and Relax

How would you like to have an assistant who would dial an online service for you, log on with your secret password, check for electronic mail, visit several roundtables that you have designated to read new messages, download files from any library since any date you have specified, then save these items--however many they may be--to disk and log off so you can inexpensively peruse all this research off-line at your convenience? Like it? Meet *Aladdin*, the new dropdown menu cruise control developed for GEnie (General Electric Network for Information Exchange). This is the easy on-line automation you always hoped for. The good news is considerable:

- *Aladdin* is free for the cost of a download from GEnie or the cost of a disk from public domain sources such as *Current Notes,* but a hard disk drive is strongly recommended.
- Joining GEnie now is free (set your communication software to half duplex [local echo], dial toll free 1-800-638-8369, upon connection enter HHH, at the "U#=" prompt enter "XTX99493,GENIE" (the December Personal Computing access number) then press return, and have your major credit card or checking account number ready).
- GEnie now offers Star*Services that, for a flat monthly fee of only $4.95, provide unlimited non-prime time access (6 p.m. to 8 a.m. local time) to more than 100 professional, educational, and leisure services. These include electronic mail, Grolier's Academic American Encyclopedia, American Airlines EAASY SABRE, news top stories, closing stock quotes, single player games, shopping services, GEnie news, administrative functions, and many bulletin boards).
- 2400 baud no longer costs extra--300, 1200, or 2400 baud are included in the Star*Services flat rate as they are in the $6 hourly rate for services outside the flat rate.

What's the Catch?

Whew, what a deal! So what's the catch? The catch is also considerable:

- While GEnie has upgraded all its lines to 300/1200/2400 baud and eliminated previous surcharges for 2400 baud, the cleaner line requirement has eliminated some cheaper access connections where no local GEnie numbers were available. Because GEnie access is even more limited than it was before, accessing a GEnie telephone line is more likely to require a long distance call, depending on where you live. For example, calling GEnie in Rockville, Maryland, some 50 miles from Woodbridge, Virginia, costs an additional $6.80 per hour even with cheapest night rates (after 11 p.m.) because of local long distance telephone charges. Maddeningly, this rate is only about $1.15 an hour less than calling more than 2,000 miles to San Diego via AT&T! Evening rates (after 6 p.m.) soar to $10.23 an hour--truly a miserable communications ripoff in the area of "the world's most important city" (Washington, D.C.).
- Some GEnie lines--which they call "remote access"--still have a surcharge of $2 an hour.
- Many GEnie services still charge "standard connect rates" (i.e., usually about $6 an hour) including all computing services, multiplayer games (such as Air Warrior) and their bulletin boards, all software libraries, ChatLines, all real-time conference rooms, most business services, and the Computer Assisted Learning Center.
- Dialing GEnie during prime time (8 a.m. to 6 p.m.) still costs $18 an hour.
- While you can operate *Aladdin* without printing out the extensive manual of more than 100 pages, it still is nice to have the manual. Unfortunately, my Panasonic KX-P1092 printer--excellent as it is--gives up after 84 pages. Anybody know any program that lets Atari print a disk file from Page X to Page Y? Printing it ASCII via *WordPerfect* doesn't play well either, needing extensive work to fix some garbled lines and match my printing style default paging to the manual paging. Isn't computing ever simple?

Need Clean Lines

Although using 2400 baud is more appealing and accessible than ever, file downloading, in particular at 2400 baud, requires very clean telephone lines. When I first tried to download *Aladdin*, I experienced many frustrating disconnects on my local line which included an authorized access to a less expensive connection into GEnie that prevented what had been an expensive long distance call to the nearest GEnie line. But that less expensive connection was too "dirty" for down-

loading. Within a few days, access to GEnie via that connection, and presumably others like it around the country, had been permanently terminated by GEnie. Back to expensive long-distance calls to GEnie!

Worth Joining

So the lesson is clear:

- Go join GEnie for free and sign up for Star*Services at the $4.95 flat monthly rate (the encyclopedia alone used to cost $50 a year).
- Get a copy of *Aladdin* from the *Current Notes* Library (CN #517D) or elsewhere--much cheaper at $4 or so for a disk than spending around 45 minutes, even at 2400 baud, downloading the massive file, which includes a manual of more than 100 pages!
- Practice using *Aladdin* OFF-LINE until you are comfortable with it.
- Then try *Aladdin* on-line, with simple exercises at first.
- Most importantly, carefully document your total costs, particularly the hidden costs of accessing the nearest GEnie line.

Aladdin even includes a neat little clock to meter your time both on-line and cumulatively. To its credit, GEnie cautions you to consider ALL online costs, including any local long-distance charges and any GEnie line surcharges, when telling your *Aladdin* time meter how much to indicate per hour. (Later versions should ignore Star*Services time; this one doesn't.)

As an example of how efficient *Aladdin* is, the other night I asked it simply to check for any mail for me. In a little over two minutes it had done that and presented me with four letters, offering me the option of saving each to disk, to printer or replying to each. One of GEnie's great virtues is that it can be used within an hour or two of receipt to immediately start saving you time and aggravation. And the more you use it, the more possibilities you will see--and the more problems.

Elusive Menus

For example, I took advantage of the flat rate to browse some roundtables in detail. Unfortunately, I found that in some areas, GEnie no longer automatically displays menu choices when you enter an area. Instead, you sometimes get just a page number with a question mark, e.g., 870? You are expected to type M870 if you want to move there; the catch is you must know what's on that page, which you can find in the *Aladdin* index of topics. But even then, the areas themselves sometimes offer no help. My favorite, Air Warrior, no longer automatically lists menu choices--I have to remember 2 is the option for entering the game. Presumably, this glitch will be corrected.

Another problem is that while GEnie will automatically grab your letters and ask what to do with them, it doesn't exhibit similar thoughtfulness when you browse roundtable topics. Since 2400 baud is too fast for online reading, even with scrolling pauses, and lingering on-line is counterproductive to the idea of getting on and off in minimum time, I skimmed a year's worth of conversation about Air Warrior questions and answers and signed off. But did I have anything to read off-line? No. You have to turn on the capture buffer manually. Oh. Gee, why isn't capture buffer the default as it is in *Flash*? Perhaps another area for Aladdin improvement. It soon became apparent that checking into many roundtable topics is a funny combination of being charged for browsing in a bookstore and eavesdropping on disjointed conversations. It's akin to skimming transcripts of a hearing --you have to sift through lots of junk to get to the good parts, i.e., things that interest you.

> ....clearly, *Aladdin* is rubbing GEnie's lamp the right way...

I'm also not yet fluent in making *Aladdin* select files only after a certain date, nor can I confidently expect an automatic file download. So far, I attribute these shortcomings to reaching early pain in the learning curve. Likewise, I find no easy way to print a copy of my output file, or wherever that capture buffer stuff went, nor can I resend a copy of my reply to GEnie mail if I screw up the address.

PromisingRelationship

Nevertheless, *Aladdin* is such a tease, promising so much, that we are becoming close friends. We're already meeting frequently, late at night, more often than I can comfortably afford because GEnie has no local access lines. Who knows where such a liaison will lead? In talking with a GEnie representative demonstrating *Aladdin* at the Washington Atarifest, I observed that *Aladdin's* ultimate promise seems to be not just saving GEnie users time and money so much as it is giving us more for our money. For example, if my budget limits me to $20 a month on GEnie, with the new Star*Services and *Aladdin* I probably will be inclined to spend at least the same amount of money but will easily realize something like four to 10 times the return on investment in productivity and pleasure. The GEnie rep nodded deferentially. For an instant I saw him in turban with hands clasped together Middle Eastern style. Clearly, *Aladdin* is rubbing GEnie's lamp the right way.

First Impressions of the TT

A Developer Outlines Its Pluses and Minuses and the Minuses

by Bruce D. Noonan, M.D.

As a developer, Atari passes on some good deals. One of these is getting hold of computer hardware before it goes on the dealers' shelves. I wanted the TT ever since it was announced over a year ago at COMDEX. Scads of colors, stereo sound, a 16 MHZ 68030 microprocessor, the possibility of running UNIX (an industry standard operating system), and loads of other goodies really intrigued me.

Well, another COMDEX later, I finally got one. Only this one has a 32 MHz microprocessor. And best of all, it still runs TOS. Well, sort of. Unfortunately, lots of software which runs just fine on the ST will not run on the TT. I really wanted to see *pc ditto* I run very fast, but when it didn't run at all, I was disappointed. Thank goodness there are other PC emulators which will run, such as Talon's Supercharger. At least the company says it will run. As a developer it is helpful to demonstrate to a potential buyer that the Atari computers can do a lot more than run games. If I can show that it can run my medical software, games, and, say Lotus 123, it is much easier to make a sale. Never mind the fact that the TT is potentially a far better machine than the PC.

A Massive Wedding Cake

The first thing I noticed different is the shape of the computer itself. It is massive, and has been described as looking like a wedding cake (which it does). It is difficult knowing where to put it. If it is placed behind the keyboard under the shelf the monitor sits on, one cannot easily reach the On/Off switch, or slip floppies easily into the drive. I settled on placing the thing on top of the monitor shelf, stacking my CDAR504 CD ROM player on top of it, and the monitor on top of that. I have to literally look up at the screen. I may just move the CD ROM player to my stereo shelf and forget about using it with the computer. I get a horrible speaker hum when the very short DMA cable is connected to the computer anyway.

A True Sense of Typing

The keyboard is very nice. Excellent, in fact. There is a noticeable feeling of bottoming out when typing, instead of poking your fingers into mush as on the 520 ST. Also, the function keys now stand out in relief, and are not shaped like parallelograms, hence not requiring parallelogram shaped fingers for use. Also, there are mouse ports at both sides of the keyboard for easy conversion to left-handed mice.

My machine has 8 megs of memory. Wow!! Sounds great doesn't it! Well, almost great. The memory is split between ST RAM and TT RAM, which means that programs written for the ST will only get 4 megs of operating room. The screen RAM and sound RAM must be in ST RAM, and one cannot DMA (direct memory access) TT RAM. I'm not sure what that all means, except that I don't believe one can split a program's RAM requirements between the two and load data files into a TT RAM buffer which has its main program in ST RAM. Of course, where there is a will there is a way, and before long someone will figure out just how to do it. In any event, when I made ST Writer Elite 4.0 compatible with the TT, I left it in ST RAM, and restricted its memory limits to the size of ST RAM.

The Joys of Booting Without Documentation

The 40 meg hard disk came built in. We developers must be regarded as highly intelligent by Atari. That is evidenced by the fact that my machine came with no operator's manual or even a floppy disk. Or maybe it is one way of performing an intelligence test on developers. I had a meeting of my users' group that evening, but couldn't get the hard disk to boot. J. Patton at Atari was kind enough to email me the hard disk files required. Unfortunately, as it turned out, it was minus the crucial one, SHDRIVER.SYS. That was in the regular mail.

When It Isn't There, What Do You Do?

Anyway, without directions, I tried every way I could imagine to install my hard disk, I even tried using the driver for the ST without success. I kept getting the message that there was no logical device available for the driver. Having been told that the necessary files were already on my hard disk, it was most frustrating not being able to access them. Finally, I decided to try a desperate maneuver. I attempted to format the hard disk. What do you know, the computer did know about the device after all. It formatted it slick as you please, and even partitioned it. Of course, all those nice files were now in magnetic heaven. And STILL the install program failed to recognize the existence of the device.

At the meeting, I was able to demonstrate the new desktop. It is very, very nice. Even terrific. You can create beautifully colored windows and window parts. Just about everything you might consider doing from

the desktop is available by mouse and even by keystroke. Although I have never tried using UIS or Multidesk, I am told that many of those concepts are in the new Desktop. Well, you can entertain only so long looking at menus dropping down, so I showed the new extensible control panel, which, thankfully, I had on floppy disk. It is one slick piece of programming. But that's another review. You can turn off the key click, though, without cutting out the sound entirely.

You Can't Think of Everything

Just then, my partner in programming at Medical Designs Software, Bill Penner, happened to drop by with his STACY. He had a copy of SHDRIVER.SYS for the TT on his hard disk. What he did then must have been magic. He changed the name to SHDRIVER.PRG and placed it into my floppy's AUTO folder. He changed the name again to SHDRIVER.RAW and placed it into my floppy's main directory. The next time I rebooted, success!! There were 4 hard disk partitions available. He might have done something more (magic words?), I didn't pay much attention, but at least I could access the hard disk. Guess I flunked the intelligence test, Atari. Let's see. Simply change the name of the program extender to PRG and RAW (makes sense, doesn't it??). Move them into different places. Reboot. Why didn't I think of that?

Monitors and Modems not Interchangeable

The back of the machine is covered with ports, including two serial modem ports. But if you are moving up to the TT from an ST, you will need a new modem cable. This one requires a female D9 connector on the computer's side. Oh, yes, the monitor connection is not compatible with the ST either. It is about the size of a D9, with some of the pins missing. My monitor had a connector fitting the general description, but required a supplied adapter to hook up to the TT. There appears to be no way to use an ST monitor with the TT. My TT monitor is the Atari TTC1434, a VGA monitor. The colors are brilliant, and the text sharp. The 8x10 character set used by ST low and medium resolution now appears blocky, as opposed to slightly fuzzy and smoothed out on the old ST monitors.

Some Will, Some Won't

I would imagine you have the same questions about program compatibility with the ST as I did. From what I have heard and tested myself, here's the scoop:

- All GFA basic programs will not run compiled, since they assume that only 24 bits of the address are used. The TT does not ignore the top 8 bits of the address, in which GFA stuffs information for its own use. Therefore, the addresses are bogus, and cause the computer to CRASH. It is my understanding that ver 3.5e of the compiler fixes the problem for GFA 3.0 programs, however.
- *ST Writer Elite 4.0* works perfectly (natch) in all resolutions.
- *Word Writer ST* works, but in TT Medium Res, the three rows of buttons at the bottom are a few inches higher up the screen.
- *Word Perfect* runs ok in the ST medium and high resolutions, but when calling up the file selector box in TT medium res, it crashes.
- *Publisher ST* won't run at all. It keeps displaying a dialog box saying it cannot locate PUBLISH.RSC. I put that file in every director I could think of without success. Must be a symptom of deeper problems.
- *Laser C* will not run. The shell bombs out. Megamax says they are aware of the problem, and have a programmer in Germany working on a fix which should be out in January. The German programmer, it seems, has a TT, while the Megamax people in Richardson, Texas, don't. By the way, Megamax has shelved their ANSI C compiler for the Atari because they feel that hardware sales in the U.S. do not warrant it. When asked about developing it for possible sale in Europe, they replied that Turbo C has the market sown up.
- *Degas Elite* works in ST resolutions.
- *Fontz!* appears to work in all resolutions, but I didn't have the chance to try high res TT monochrome on any programs.
- *Phasar* runs well, although the windows do not extend to the bottom of the screen in TT medium res.
- *VIP Professional* comes up on the screen, then locks up (crashes).
- *Flash*, I have been told, will not run.
- *ST Talk Professional* crashes. *ST Talk* (the original) does work. Unfortunately, the XMODEM routines are not CRC, so can't be used by CompuServe for email. I hear that *STalker* and *STeno* work, however.
- *Battle Chess* works fine except for sound from the BLUE team only, for some weird reason.
- *Psion Chess* works only in 3D mode, not 2D.
- *Chessmaster 2000* will not run at all.
- I can't get any of the Sierra games to boot.
- *Typhoon Thompson* will not boot.
- *Zany Golf* works swell, although I think the ball rolls slightly faster than on the ST.
- *ST Star Raiders* will not run.
- *Joust* RUNS. I mean ZOOMS! Gravity is sped up so much by the 32 MHz machine that one cannot pump the button to flap the bird's wings fast enough to gain altitude. The enemy flies by so fast you are lucky if you unseat an opponent, and the time delay

before the pterydactyl comes seems to be shortened as well.

- *Music Studio* will not run.
- A PD program, called *Background Music*, runs, but the music is weird sounding, as though being played through a kazoo.
- *Michtron Utilities* runs just fine.
- *Atari's SID* (symbolic interactive debugger) works.

A Fine Machine, but a Hefty Price

In all, I think the TT is a fine machine. It shouldn't be long before the developers fix their products for compatibility with the TT. A big problem is the TT's long stack frame, requiring the programmer designing a Trap exception to correct with 8 instead of 6. What that means to non-programmers is two bombs (address error).

The high cost of the TT makes the Mega STE look like a good bet for the majority of users. It has 16 MHz, stereo sound, and is cheaper. It won't handle spread sheets as quickly as the TT, especially since the TT has a 68882 math co-processor, but currently no spreadsheets have been written to take advantage of the co-processor. But the TT is HERE (and available just over the border in Canada at Atari dealers), and the Mega STe is still vaporware as of December, 1990. I expect to get a lot of use from the TT.

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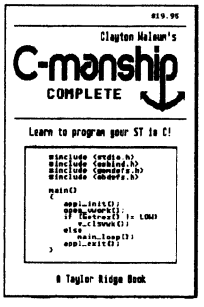

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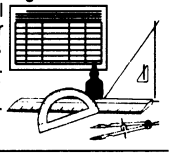

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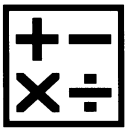

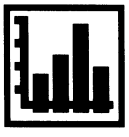

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SEVERNA PARK, MARYLAND - Toad Computers today released a statement indicating that their direct mailings over the past few months have been incredibly successful. Dave, director of advertising said, "We've got the coolest database of Atari owners anywhere." Dave suggests that all interested in being on the list who aren't on it already should send a postcard immediately. They also would like to know of any incorrect mailing addresses, to save paper, money and postal strife. Companies interested in being included in Toad Computers' now legendary mailings - in trade for services or products - should contact Dave immediately.

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SEVERNA PARK, MARYLAND - Toad Computers recently disclosed its interest in used hardware, especially eight bit peripherals. Anyone interested in purchasing or selling used Atari equipment - eight bit or otherwise - should call, or preferably send a postcard to Toad Computers today! Plans may include becoming the only major Atari equipment refurbisher in the United States.

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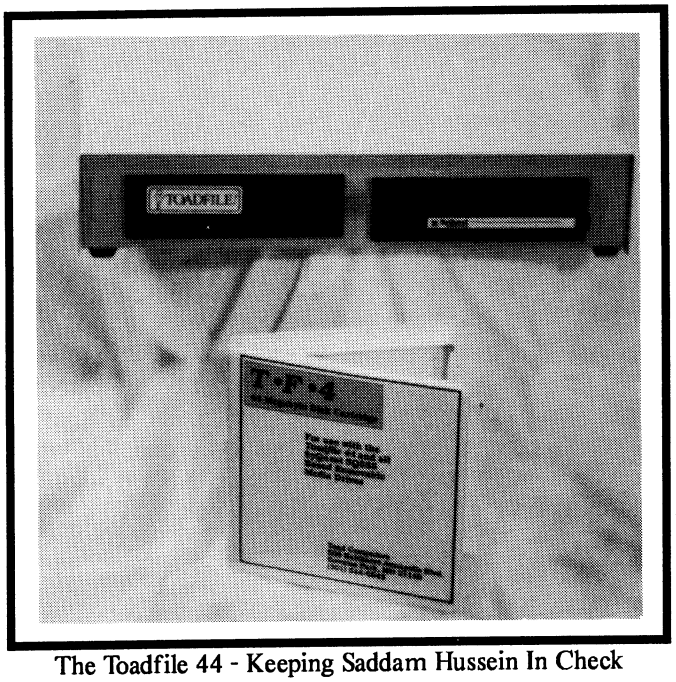

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The Sad, Sad World of PC Clones

Buying Your ST Was the Best Thing You've Done!

by J. Andrzej Wrotniak

Approaching me some months ago with an offer to join his firm, my new boss did not start from promises of money, fame, women or such. "Of course, we will buy you an Atari computer of your choice," he said instead. I could not refuse the offer. I am in.

My job is solving problems, or inventing ways to solve them. This involves programming: a solution should be checked out. Then the other guys take my solution and put it where they need it.

These other guys work in a relatively new language called C++. Their lives would be much easier if I could also write my stuff in C++. There is no C++ compiler on the Atari ST. So I went to my boss and said "You know, I am a really nice guy and you can get me a PC clone instead of an Atari ST." Was this man happy! I was about to turn compatible!

This was how I ended up with a PC clone on my desk, running its 80386 processor at 25 MHz and sporting four megabytes of memory. Wow! Who may need an old, one-megabyte Atari crawling at 8 MHz?

Well, after a couple of months of using this machine I am really happy I do not have one at home. There are many reasons for this.

First of all, after having used the graphic interface of the Atari ST or Macintosh, there is really no way back into the command line world. I never remember the exact spelling of my files or folders, and without a point-and-click approach this can become a pain.

Some people have realized this at last, so we now have some windowed user interfaces for the PC. The latest DOS 4.0 even has a graphic shell, a sort of added-on afterthought. Without bothering you with details, this shell is good enough to be used once and then forgotten about.

Wait, some might say, and what about the newest Windows 3.0 from Microsoft? Everybody in the PC world is now raving about Windows!

Windows 3--Still Not Quite There

Windows 3.0 was bundled with my machine. My first impression was quite good. The program looks nice and crisp, and there are lots of widgets to play with. Being able to exit from a program without terminating it, then to do something else and instantly come back (if your model does multitasking) is a nice capability.

On the other hand, doing the simplest things under Windows (like rearranging files) is not as easy as it should be--the interface is far less straightforward, intuitive and convenient than on, say, the Atari ST, Macintosh or Amiga (let me refer to these as the "other machines.")

Microsoft went to great pains to make Windows look and feel as differently from the Macintosh as possible. Yes, we know Apple is suing everybody in sight for the Mac "look and feel" they didn't even invent. This is why I will never buy any Apple products (they are overpriced, anyway).

This attempt to look different resulted--in many cases at least--in quite clumsy procedures to do really simple things. When you run Windows, you get yourself into something called the Program Manager window. There you have sub-windows with groups of programs you may execute by double-clicking (they should have used triple-clicking here, to be safe from the possibility of being sued by Apple!). You may install new programs and new groups, but the process is not as convenient as just dragging a program file to the desktop as on the Mac (or, for that matter, in *NeoDesk* on the ST).

If you want to perform any file operations, you must open the Utilities sub-window in the Program Manager and run a program called File Manager. This thing is a real dog. Its window contains, at first, just the disk drive icons. Double-clicking on an icon opens the drive root directory, which will then replace the drive icons in the window (unless you set the appropriate option in one of the menus).

To delete a file, first select it and then go to the File menu to click on Delete. Much less convenient than just dragging it into the trash. Or click on Copy, and then you will have to type in the destination path. How thoughtful--just to make the withdrawal from DOS less painful for compulsive typers!

Well, you can also drag a file from a window to a window (this is less convenient than it may seem, as the windows open in a staggered overlapping pattern). One day, I crashed four times in a row trying to perform this operation. Enough is enough.

These are just examples. I have used Windows 3 for six weeks just to acquire some familiarity with this highly regarded, supposedly user-friendly system, intended to bring computers closer to the non-techies. I have discovered some obvious bugs, experienced some mysterious crashes, and often I had to refer to the manual to do the most elementary things. Well, now I am back to DOS, where things are more predictable.

Browsing through the recent issues of PC oriented magazines, I recently found four (!) third-party user interface replacements for Windows 3. The one I like most sells for $180 (and looks very much like the "other machines.") To hell with it.

GEM 3.0--A Pathetic Retreat

When Digital Research, Inc. first came out with the GEM desktop, the PC version was very much like that running on the ST. Nothing to write home about, but simple and intuitive.

Then our friends in Apple sued DRI for the Mac "look and feel." The DRI execs called their programmers and said "Do something so that our look and feel is no longer like Mac's, and do it cheap and fast!" This marked one of the most pathetic evolution (devolution?) paths in the history of software development.

The newest Version 3 of the GEM desktop for the PC is a far cry from the original. Some changes may just look funny, like moving the Desk menu from the far left to the far right (what a stroke of originality, so much different than on the Mac!), some are only irritating, and some reduce the convenience. None are for the better.

First of all, the Mac has a trash can. Let us get rid of it, adding the "Delete" entry in the File menu. Here is an example of how small changes may make using the program much less convenient. But, to strike the right balance, let us remove the "New Folder" entry from the menu, adding instead a "New Folder" icon to each window! Well, now we see something which is not really there, but the Mac does not have it!

Not enough? Let us remove all drive icons from the desktop and move them into the windows. Two windows, no less and no more; you cannot close them nor add a third one. Now when you open a drive directory, the drive icon is no longer there, covered with the directory itself, and when you have two directories open, there are no drives on the screen at all. Inconvenient? Maybe. But so much different than on the Mac!

Resizing or moving desktop windows? Who needs that? Let us have each window occupy a horizontal half of the screen; this is good enough. It may be somewhat inconvenient when you use the text mode to show directories (you can see just a few files at a glance, but lots of space to the right is being wasted), but nobody will accuse us of looking and feeling like a Mac! And this was how GEM, having a chance to become a standard user interface in the PC world for those who do not want to learn DOS (or who just like the convenience), became a dead-end street of evolution.

DRI is now selling a very nice replacement/superset of the MS DOS, called DR DOS. Among lots of nice features it also has a graphic shell--and this is a clone of GEM v.3. Aargh!

If the DRI people knew any better, they would have approached our Dan Wilga from Gribnif Software. He could give them a lesson or two on how to make user interfaces. Or, if you insist on looking and feeling as different from the Mac as possible, then Charles Johnson's *Hotwire/Maxifile* combo from CodeHead Software would do nicely, thank you. Anything, but not GEM 3.

How Much Memory Does Your Machine Have?

My 4-megabyte PC runs out of memory much more often than my 1-megabyte ST. Welcome to the brain-damaged PC DOS architecture. Many programs do not know how to use the extra memory! My C++ compiler chokes on modest-size programs. The thing is smart; it would swap the memory to and from the hard disk, but when I recently added about 50 lines to a program, the compile/link time jumped from about 10 seconds to more than six minutes. Isn't that special?

If you are a programmer, you will soon become frustrated with all the limitations in memory usage. I had a field day recently watching a colleague of mine, an experienced programmer, wasting lots of his effort on these things. How do you allocate more than 64k of memory on the heap at one time? How do you work around the 64k limit for unit code, for the stack, or for a data block? We on the ST, with its civilized Motorola processor, do not even suspect these problems could exist in the last decade of the 20th century. After listening to the man's complaints for a while, I asked him an obvious question: "Why don't you get yourself a real computer?"

Well, there are many good and powerful programs in the PC world. Using them I sometimes wonder: how much programmer's time and effort has been devoted to just fighting the computer limitations instead of using its features? Let me spare you the answer.

A Program--Or a Way of Life?

There is one basic problem with the "off-the-shelf" software for the PC. Almost every program has its own standard user interface. You cannot just take a program out of the box and start using it. First, you have to memorize the function keys, keyboard commands, or the peculiarities of the program graphic interface. You do it again for almost any new program you use.

The "other machines" come with a toolbox of graphic output and user interface primitives supplied by the computer manufacturer. The programmers are strongly encouraged to use this toolbox in a uniform manner. The more programmers depart from those recommendations, the steeper the user's learning curve becomes. A program becomes a way of life, not just something to use to get things done.

On the PC, writing the user interface from the ground up becomes a major investment in developing a program. Choose, randomly, ten public domain programs for the PC and ten for the Atari ST, and you will see the difference.

The tool boxes I have mentioned come with some PC graphic environment packages, like GEM or Windows. Using them would, however, seriously limit the market for a program (GEM never became really popular on the PC and Windows still has a way to go). Besides, programming for Windows is much more difficult than for GEM, and the developing tools are very, very expensive.

The Brighter Side

The only positive aspect of having a PC clone is the size of the hardware and software market. Through their heroic efforts, the PC programmers somehow managed to come up with thousands of application programs for almost any purpose. Some of these programs are mediocre--one of my friend's reaction after having moved to a PC was: "You would not believe what pieces of junk are being sold for hundreds of dollars! Those suckers will be happy with almost anything, the stuff nobody would take for free on the ST!" But some of the other programs are excellent, and the choice is wider than for any other machine.

As a programmer, I am really frustrated we do not have two important languages, Ada and C++, on the ST. Both are very powerful and especially suitable for developing large programs. I miss them badly; were they available on the ST, I would never have had to have this ugly PC clone on my desk (not to mention all those remarks from my co-workers who know my feelings in the matter).

Even in the domain of more established languages, the PC and Mac have a strong edge: the implementations of C, FORTRAN, and especially Pascal are significantly more advanced there (give me *Turbo Pascal 5* or *Mac Pascal*, please!). Well, this is the price we pay for staying in the cozy, small world of Atari.

The choice of hardware add-ons in the clone world is also better than anywhere else, and the open architecture plus the market size make the prices quite attractive--the advantage of staying with the crowd.

"Do I Need a PC Clone?"

People ask me this question almost every week, expecting a clear yes/no answer. The answer is, "It depends." If you need to run programs not available on the ST, well, get a clone and be stuck with it. This may be the case if you need a custom program to run a dentist's office or a company gas usage optimizer.

If, however, you expect your needs will be of a more mainstream nature, like word processing, spreadsheets, graphics, databases, desktop publishing and such, then going for a PC does not make much (if any) sense. The existing software on the ST covers these aspects perfectly (well, almost), and the computer is so much nicer to use. (Not to be accused of self-promotion, I will not mention that you cannot run *El Cal* on the PC.)

Let us also not forget the emulation capabilities of the Atari ST, which are second to none. With the Spectre GCR, PC-SPEED (or other PC emulators), we can switch easily between the environments. Now, try to do it from a PC! (Who knows, maybe the mysterious Ms. Schuetz with her Donnerwetter ST from Komputer-saftenwarenprogrammierunggesselschaft will decide to show up at the Fest? This would be something!).

Last, but not least, it seems like the Atari enthusiasts are a bunch of dedicated, knowledgeable, helpful and fun-loving computer hobbyists. I am not saying this just to make you feel good; indeed, I believe our micro-world is really exceptional in this aspect.

So, if on some rainy day, you have second thoughts about whether your choice of machine was the right one, remember the title of this article and feel lucky you are not stuck in the sad, sad world of PC clones.

[Reprinted from the WAACE AtariFest 90 program.]

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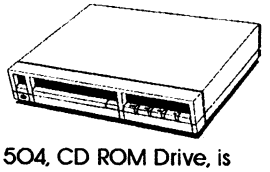

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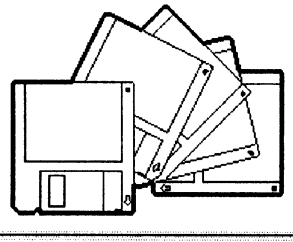

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Future Wars

Breathtakingly Beautiful Cinematic Time Travel

Review by Alfred C. Giovetti

Well, here we are again gathered near a fire or other device designed to produce comfort in comparison with the prevalent local environmental conditions. We all seem to have settled in with a favorite libation and we are sharing a conversation over the advantages and disadvantages of recent forays into the unknown and dangerous world of an adventurer. Now I ask your indulgence for a few moments concerning my latest trek to the outback of unreality. And when the tale is told, I would value your considered opinion and comments on the tale and the telling. And so it begins anew.

Beautiful Award Winner

Future Wars is one of the most beautiful computer games I have ever seen. Future Wars' computer graphics approach art in their beauty and the finesse of their graphic displays. The game involves arcade sequences which I tolerated just to see the next beautiful screen. The plot is not bad, either. *Future Wars* is from the French game design group, Delphine Software, and has won awards from "Tilt" and "Generation 4" magazines.

Future Wars was runner up for the Best Quest of the Month award from "Questbusters" magazine. Interplay Productions has the rights to U.S. Distribution of the Atari ST, Amiga and IBM versions of the game. Interplay was so impressed with the game that they agreed to put the game under their masthead in the United States. I was similarly impressed.

A New Game System

Future Wars is the first release of the new "Cinematique" system of graphic adventures. The "Cinematique" system uses a mouse to control inventory management, conversation and character movement. The point and click mouse interface uses a series of pop-up text and command menu windows to completely eliminate the need for a parser, thus making the game as user friendly as possible. The MS-DOS version of the game has a keyboard interface that allows the use of the keyboard, number pad and "QWEASDZXC" keys to control the cursor and movement in eight directions.

In order to complete the game, you will need to use a mouse or joystick interface. Many arcade sequences cannot be completed using the sluggish and imprecise movement of the keyboard interface. The mouse is necessary to complete the fire fight outside the alien ship, where at least 30 "croutons" must be targeted and shot before they shoot you and end the game. The mouse interface is sophisticated and easy to use, providing the precise and quick control necessary for the successful completion of the arcade sequences.

Cinematic Adventure

Future Wars is an animated adventure similar to those currently being produced by Sierra and Lucasfilm except that no parser is used and no typing is required. All actions can be completed via the ten function keys and a mouse interface. The keyboard can also be used for all actions, but with less efficiency where the arcade sequences are concerned. The ten function keys control the actions of examine, take, inventory, use, operate, speak, display the action menu and display the user menu. A sample action could be completed by the following sequence: click on "use" (or push F4) from the action or activation menu, click on an item from inventory, and click on tree, a section of the animated display.

The Evil Croutons

The evil Croutons have crawled out of your salad and by the 44th century have evolved into an evil humanoid race bent on subjugating the galaxy to their will. Well, not exactly. "Our hero" mistakes the protagonists, the Evil crughons, for croutons and a running joke is born. The plot is humorous, but not that silly. "Mankind's future depends upon the player's abilities to criss-cross through time, solve intriguing puzzles, successfully combat a wide assortment of mutant monsters and alien storm troopers, and perform a miraculous rescue or two."

The plot of the game is an old one. The evil army of near human monsters is trying to take over the world, and (you guessed it) we, in the persona of a 20th century window washer, are recruited to stop it.

In the beginning "our hero" is a 20th century window washer on a skyscraper in some large modern-day city. "Our hero" revenges himself on a cretin (no not crouton) of a boss, and while hiding from the now enraged superior, stumbles upon a time machine behind a secret panel. The time machine transports "our hero" to the Middle Ages and the adventure begins. You, in the form of your alter ego, or, "our hero," bumble and battle your way through evil Middle Ages monks, a future war-torn holocaust landscape and civilization and a cretaceous panoramic landscape

battle with crouton antagonists. Finally, you track the evil army to their orbiting space fortress which you manage to destroy and evacuate in the nick of time. Along the way you manage to save the beautiful curvaceous planetary defense agent heroine named Lo'Anne who falls immediately for your window-washing charms.

The Plot, Boss, the Plot?

Future Wars' plot is linear. Each part of the game has a series of screens and puzzles for you to solve. After solving the series of small puzzles you are rewarded with an animated story telling sequence which carries you to the next series of puzzles and screens. You solve the puzzles by searching the beautiful art-like screens for items that you use to solve the puzzles. Often the items for which you are searching are as small as one pixel in size. Once you solve a series of small puzzles you move onto a new section of the game and you are not permitted to go back and redo the previous section of the game. If you miss picking up an essential item, you must re-boot and go back to an earlier save game and get the required item. This process requires multiple save games.

Future Wars allows you to save 10 games per hard disk or floppy diskette. Even though I ran the game on my hard drive, I found it necessary to save the game on multiple floppy diskettes to accommodate all the save games needed to make sure I would be able to go back to any part of the game and pick up the missed items.

Future Wars' plot is very entertaining. After searching the Middle Ages area thoroughly you eventually find out that the evil croutons are from Betelgese and are at war with the Earthlings of the 44th century.

The war is fought by jumping back and forth in time via time machines in an attempt to use time to get an advantage against the other side. The croutons try to set bombs in the areas where planetary defense shield generators will be positioned in the future. The bombs are set to explode in the future after the shield generators are in place. Your job, and the job of the planetary defense agents whom you are helping, is to go back into the past and prevent the planting of these bombs and destroy the orbiting crouton space fortress. A real nice touch is an explanation of the earth's prehistory by some of the events generated by the conflict.

Arcade Sequences

Some game players found the arcade sequences in *Future Wars* frustrating and annoying; and others found the level of excitement enhanced by the arcade sequences. The arcade sequences are time limited. You race against the clock. You should save the game before every arcade sequence. Each arcade sequence may take many tries before you get it right.

One sequence requires mapping. There is a six-minute sequence at the end of the game where you have to go down to the computer room, disable the bomb, then go up to the medical shuttle to get off of the space station before it explodes. It was necessary to map the 16 level maze, which was three computer screens wide. Each computer screen was two levels high. Once you have mapped the maze, you will be able to complete the maze in the required six minutes. You have three minutes to get down to the computer room and three minutes to get off of the space fortress. It took many tries from the save to construct the maze, however.

Great Features

Future Wars sounds as good as it looks. There is a sophisticated full musical score and realistic sound effects. The IBM version supports sound boards and the Atari ST version supports MIDI. The soundtrack is reputed to be available on CD for use on your home stereo. And if the sound becomes annoying, you can easily switch it off with a key press ([Ctrl]+S).

Future Wars does an admirable job keeping an even, witty and humorous tone throughout. Many situations arise where the computer makes humorous comments upon what is happening in the game. It is rare that the right amount of humor is added to a game. *Future Wars* adds enough humor to keep you interested and entertained as you move along from one puzzle to the next.

Future Wars provides a convenient user menu which is just a key press away (F10). The mouse or the F10 key can be used to access the mouse pop-up menu window. The user menu allows for convenient access to the functions of "Pause" game, "Restart" game, change "Backup Drive," "Load" a saved game and "Save" a game in progress. You need not quit when saving. Like Sierra games, you are permitted to give your own description for each of the ten save game slots. If you die it is easy to load a save game without having to re-boot the game. The process of loading is simple and quick.

What You Get

Future Wars comes in a 9x7x1 inch, hard-sided slipcased box. Inside the box is over 1 megabyte of program on the double density disks provided. In addition to the disks, the box contains a four page manual with a copy protection graphic, a version reference card and a product registration postcard. The back cover of the manual is the copy protection scheme. There is no on-disk copy protection. After booting the game you match a black and white screen display with the full color graphic on the back cover of the user's manual. You identify the colors of two paint

splotches on the pants leg on the graphic, and if you answer correctly you are allowed to continue with the game. You are required to go through this copy protection routine only one time when you boot the game. Unless you quit to DOS no further copy protection is required.

The four page manual along with the version reference card is adequate to the task of explaining how the game operates. The small size of the quite excellent manual reflects the simplicity of play involved with the "Cinematique" game system. The manual even has room for one column of "Advice to New Players," and a walkthrough for the first part of the game in a second column. Mediagenic, Interplay's distributor, has reported that a hint book is available, but it has yet to be offered in stores or to distributors. Interplay provides a technical support number which answers questions and provides hints for those who get stuck or wish to know something more about how the game operates (1-714-549-2411).

Reservations

Future Wars "Backup Drive" utility and save game feature only accommodates drive letters up to E. Some systems have many more drives or drive partitions than 3, especially with the Atari ST where the largest drive partition permitted is about 15 megabytes. The time limited arcade sequences in *Future Wars* proved tedious and frustrating for some who have played the game.

Future Wars copy protection works fine for someone with normal eyes. However, someone with eye problems will have trouble booting the game and getting through the copy protection scheme. I often found myself rebooting the game after failing the copy protection test and my eyes are as near perfect as the average individual is going to get. The colorful graphics and one pixel resolution is murder on someone with color blindness or astigmatism. The colorful graphics and one pixel resolution of important items would also be unforgiving for someone with eye problems. It is ironic that one of the greatest features of the game may prove to limit the appreciation of this product for those with vision impairment.

My only other reservation is more of a compliment. I felt the game was too short. I look forward to seeing more games from Delphine Software. The end game animated sequence hints of a sequel, even though Interplay is not saying anything about this area.

Conclusions

Interplay was right about *Future Wars*. Interplay benefits from its association with this animated adventure. *Future Wars* goes beyond the cartoon-like animated sequences of other animated adventures. The animation reminds one more of a movie (Cinematique) than a cartoon. European games often miss the mark where quality and playability are concerned: not so *Future Wars*. *Future Wars* plays well and has high quality throughout. You will want to play this one through to the end just to see the beautiful animated sequences.

Future Wars is not for everyone. If you like Sierra and Lucasfilm games, you probably will like this one. Many computer role-playing adventure gamers (CRPG) have said that they enjoyed this one. I was one of many diehard CRPGers who played it through to the end. If you like Sierra or Lucasfilm animated adventures, give this one a chance and you will like it.

Interplay Productions, 1575 Corporate Drive, Costa Mesa, CA 92626, Telephone 1-714-549-2411. & Delphine Software, France.

Future Wars Hints:

Warning: Do Not Read Any Further Unless You Want Hints On How To Win At Future Wars.

General Advice. *Future Wars* has several time dependent animated sequences where you race against the clock to complete several successive tasks. If you do not "beat the clock" you die. These animated sequences include the coded door in the skyscraper, the teleport in the skyscraper, the fire fight outside the crouton ship, the invisibility pill sequence on the crouton space fortress, and the maze down to the crouton space fortress computer center. Apparently, all other arcade sequences are not time dependent. Be careful to search for essential items before moving onto the next screen.

Future Wars requires that you examine some items closely in order to be able to activate the items. When you examine the item a popup window emerges showing you an enlarged portion of the item examined. This works with maps, control panels, etc.

The Walkthrough. *Future Wars* has a walkthrough for the first 18 moves of the game on page 4 of the game manual. After going through the door to the office on the right hand portion of the screen with the bathroom in the skyscraper close the door you just entered (operate door) and open the cabinets below the shelving behind the door with your key. Examine the typewriter ribbon for the automatic door code. Search the desk for a small piece of paper and get the paper. Use the flag from the bathroom on the map to open up the secret passage. When you use the flag on the map, look closely (examine) the map for a little hole. Use flag on the hole in the map. Save the game. Slow down the animation by pressing the "-" key, on the numeric key pad, repeatedly. You only have a few seconds to enter the code on the typewriter onto the key pad to the right of the triangle shaped door, and to enter the door once the door opens. Save the game.

Go to the machine, in the center of the room, that looks like a copy machine. Push the red button, then the green button when the paper falls out, get it. Put the paper from the desk drawer into the slot on the machine. Push the green button and step into the light beam to the right of the machine before the "crouton" fries you. This may take a few tries to get the timing right.

The Middle Ages. Be sure to walk only on the dark portions of the swamp or you fall in and drown. Walk to the left. Save game when close to insects. Use insect repellent on insects. Get pendant (one pixel) on ground near left hand side of screen. Walk off left hand side of screen. Walk to tree near lake, get rope from base of tree. Use rope on tree near where large limb comes off to climb tree and wait until a man comes to the lake for a swim. Put the man's clothes on. Walk off the left side of screen. Walk around the castle to the back and off the screen behind the castle. Walk to tree. Operate tree until coin falls from monk's cassock hanging on limb. Get coin. Go back to the inn. Give coin to innkeeper and listen to the conversation in the inn. Go the castle gate and show pendant to the guard. Talk to the noble. Steal lance from castle gate guard. Use lance on monk's cassock in tree. Put cassock on. Save game. Go to lake and fill the plastic bag with water. Go off the bottom of the castle screen. Use bag of water on wolf guarding bridge. This may take several tries.

The Monastery. While in the monastery hallway, walk near walls and always walk clockwise. Go through west door in hallway. Talk to monk at altar. Follow his instructions (the abbot is through the east hall door.). Talk to abbot. Get chalice from altar of west room. Go through the north door and use chalice on casks until you get wine. Take wine to abbot. When abbot gets drunk search him. Take remote control. Use the remote control on the furniture to the west two times. Go to wine cellar, climb ladder and use remote control on topmost barrel. Crawl into barrel. Look at case holding Lana. Find the gas canister on the lower left hand side of the glass case holding Lana. Operate case and liberate Lana. Relax and enjoy the cinematic sequences. Save game.

4315 A.D. When you arrive in the year 4315 you will need to find the sewer entrance in the screen to the left of the screen you enter the era in. You will need to find a blowtorch and some fuses and enter the sewers. The entrance to the sewers is through a sewer manhole. You may have to operate the rubble in the middle of the screen. Save game.

The Sewer. Enter the sewer entrance and go to the right until you find a gas tap connected to a pipe about waist high on the sewer wall. Fill the blow torch at the gas tap. Keep going until you find a monster that is attacking a woman and her child. Use blow torch on monster. Climb ladder produced by mother. Use lance on the TV monitor over the middle of the two doors in the center of the screen. Enter doors. Save game.

Metro Station Newspaper. Go to the newspaper dispenser in the west part of the screen. Look in the coin return and get coin. Put coin in coin slot. Repeat procedure until the broken machine gives you a newspaper. You may have to hit the machine several times. It took me quite a while to get this one right. I had to let many trains go by before I finally got the newspaper. Take the subway train. Get off subway train at next station. Talk to the woman. Go off the screen to the south. Look at fuse box in the upper left corner of the screen. Find the one pixel broken fuse and replace it with a good fuse. Go back to the north. Talk to the woman, look at cop and sneak past the cop who is now watching television. Go up the escalator. Enjoy the ride. Save Game.

Crouton Holding Cell. When in the cell on the alien ship use your key on the ventilation duct grating to remove the grating, use gas capsule on air duct and use paper on air duct. Pick up anything you find in the control room of the ship. Enjoy the next animated sequence.

Cretaceous Shoot Out. When you arrive in the cretaceous era, move down left (south west) repeatedly (push the "z" key or "1" key on number pad) to get down the hill. Save game. Use the mouse and the left mouse button to shoot all the croutons. There are over 30 of them. Lo'Anne gets shot. Search Lo'Anne. Get invisibility pill and pendant. Use the pendant on Lo'Anne. Search the crouton lying to the left of the ramp of crouton ship. Get magnetic card. Enter ship. Use magnetic card on the card reader on the wall to the right of the door to the control room of the ship. Operate glass case at the bottom center of the screen to open it. Get uniform and put uniform over the TV camera to the left of the entrance door. Operate case to open. Click on case with mouse to get into case. Operate case to close the case. Save game.

Crouton Space Fortress. As soon as you land on the crouton space fortress, move quickly to the wall to the left of the cabin entrance door under the control panel and wait until the door to the cabin is almost fully open before taking the invisibility pill. Have the command use pill on in the machine with the mouse cross hairs on "our hero." At the crouton space fortress you have a very short time to take the invisibility pill, walk out the door, go down the ramp, then walk toward the bottom of the screen around the crouton at the bottom or the ramp between the bottom of the screen and the boxes and walk "behind" the boxes (between the bottom of the screen and the boxes). Walk from the bottom cen-

ter of the screen to the bottom left side of the screen until you can go no further left. If you turn visible before you are "behind" the boxes at the bottom of the screen, you will be killed. You may have to repeat this sequence of events many times until you can do it fast enough to be "behind" the boxes before you become visible. At the bottom of the screen, you will run into a box by going left. Operate the box to the left of you and get in the box. Save game.

Maze Mapping in Time. Once in the store room enjoy the next animated sequence. Once you go out the door to the north of the store room the timer for the maze will start running, so save the game before exiting the door. You should map this maze to get through it in the 3 minutes necessary. You will need the other 3 minutes to escape. The sequence is right a screen, down a level, right, down two levels, left, down, right, down two levels, left, down two levels, left, down four levels, right, up, up, right, up three levels, right half a screen, down five levels, left, down, right, down, left three screens, down one level, right three screens. Enter computer room. Walk to computer console on the left center near the window. Look at computer, operate computer, look at console, use card in console. The pendant should take over and deactivate the bomb.

In order to get to the first aid or medical shuttle you repeat the above sequence through the maze in reverse order except that when you get to the seventh level you go left instead of right to the door with the two large arrows. When you enter the door the game is over and the clock stops running. You now can now relax and enjoy the ending animated sequence.

I hope this solves any concerns that you may have had concerning the completion of this game. I guess I must be going. Why don't you stay and enjoy yourself. Have a drink on me. Listen to a few more stories. Until next time, thank you for your support and I guess I will see you on the boards. Oh, and do not forget our meeting here next month.

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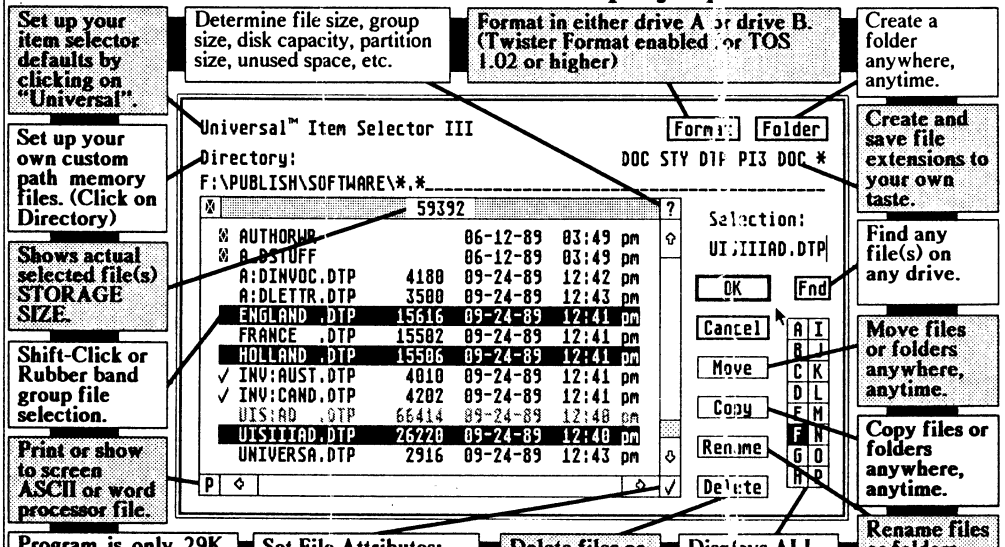

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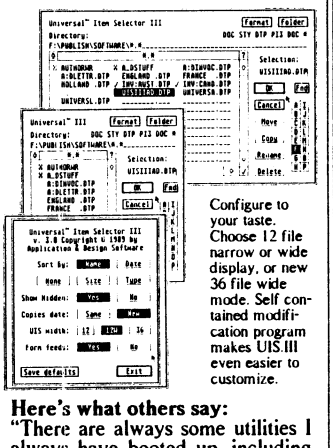

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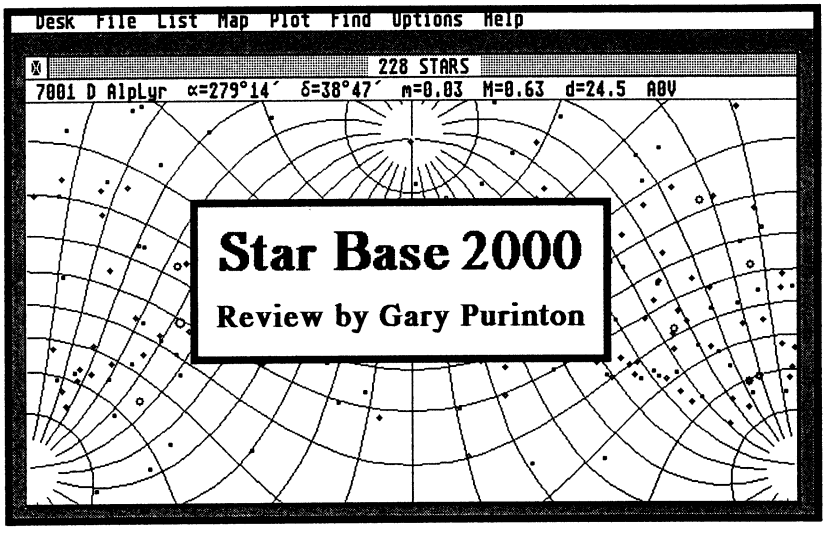


Star Light, Star Bright

While participating in a seminar for science teachers last year, I decided to develop a lesson involving star brightness (stellar magnitude). I needed to know how many stars were in each of several different magnitude ranges. That information was harder to find than I had expected. In fact, I never did find data for the fainter stars.

This summer, as part of an educational project to pioneer the use of CD-ROM technology in the science classroom, I was presented with the entire Yale Catalog of Bright Stars on CD-ROM. The Yale Catalog is an extensive database of the characteristics of the 9096 brightest stars, and I was looking forward to using it. Unfortunately, the information was in text format, and no convenient way of accessing it as a database was suggested. I tried loading it into a spreadsheet, and had hopes of graphing some of the characteristics, but the database was too large to handle. In the field, each astronomer who uses this data evidently designs his or her own software to access it with particular research needs in mind.

What I needed was a general star database which could retrieve and display information about the characteristics of stars in a useful format. Little did I know that J. Andrzej Wrotniak was at that moment putting the finishing touches on just such a program, appropriately called *Star Base*.

Star Base, which is distributed by Debonair Software, is obviously very narrow in application, but what it does, it does well. The entire program employs familiar GEM pull down menus and point and click interface (except where alphanumeric data must be entered). Most menu choices have keyboard equivalents. Multiple windows can be opened at the same time, and you can switch between them. When excessive choices would clutter up the screen, "buttons" are utilized which present further lists of selections in the form of a pop-up menu. It will work with either monochrome or color monitors, but looks better in the high resolution monochrome mode. It also supports the Moniterm monitor.

9,096 Stars

Star Base allows you to select and sort stars from among the 9096 stars in the Yale Bright Stars Catalog and display information about them in text, map, or graph format. It will require a full megabyte of memory to access the entire database. The selection can be limited by defining limits for each of several criteria ("fields," in database talk).

For example, you could list, map, or plot all the stars which have a magnitude between 2.5 and 3.5, are in the blue temperature range, and are closer than 100 light years.

What you cannot do is graph the different characteristics against each other. Only one set of criteria can be graphed--the most important one, absolute magnitude versus color (producing the Hertzsprung-Russell diagram). *Star Base* also lets you display and map information about the Sun, Moon, and planets, and you can print out any of the information displayed throughout the program.

Menu Options

After booting up the program (which is not copy protected) and getting past the title screen, you are presented with a simple menu bar across the top of the screen, inviting you to start clicking away. The options are **Desk**, **File**, **List**, **Map**, **Plot**, **Find**, **Options**, and **Help**.

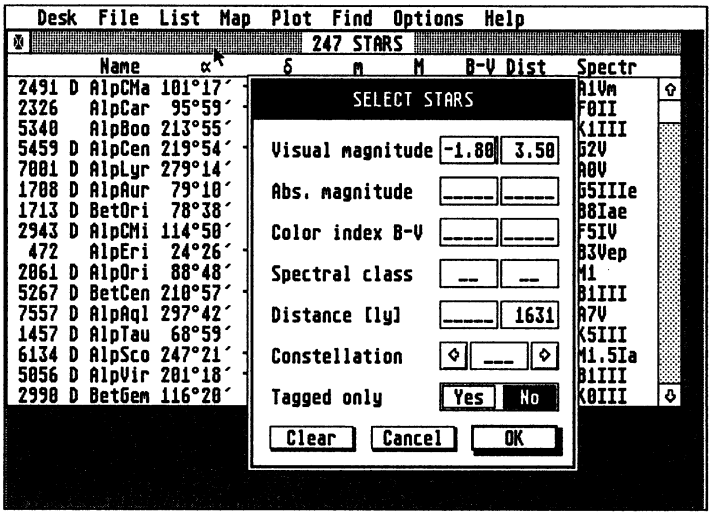
The **List** menu is the place to start. That's where you select the stars with which to work. I highly recommend that you select a subset of the entire database before trying out the other features of *Star Base*, because some of the other functions, such as mapping, can take a while if you are using all 9096 stars.

After you have clicked on **List** and **Select stars**, you are presented with a selection box within which you type limiting criteria (see figure). You can specify high and low values for visual magnitude (apparent brightness), absolute magnitude (actual brightness), color index, spectral class, and distance. Enter only the criteria you wish to specify.

You can then list the stars you have just selected by clicking on **List stars**. The data window displayed will show the Yale number for the star, a three-character Bayer or Flamsteed abbreviation for the star and its constellation, an indicator for multiple stars, location in equatorial coordinates, apparent visual magnitude, color index,

parallax or distance in light years (you can toggle between the two), spectral class, luminosity, and the absolute magnitude (computed). An indicator in the bar across the top of the screen tells you how many stars have been selected.

Clicking on a star in the list will display the full data on the star in a dialog box. Double clicking on a star will tag it for later use. If you want to rearrange the order of the list, you can click on **Order stars** and specify the criteria on which to sort in either increasing or decreasing order.



Included under the **List** option is a Solar System window, in which the location, distances, and approximate visual magnitude, and phase (for the earth's moon) are displayed for the sun, planets, and the moon.

Mapping the Sky

The next choice on the main menu is **Map**. When you look at the stars at night, they appear to be on a large dome over your head. For the purposes of mapping the stars, we treat them as if they were actually on a great celestial sphere. Mapping that sphere holds the same problems as mapping any sphere on a plane surface--distortion is introduced. (Imagine trying to flatten an orange peel on a flat piece of paper.)

There are a variety of ways to deal with this problem, resulting in different map "projections." *Star Base* gives you the choice of four different map projections; Mercator, stereographic, orthographic, and Aitoff. You don't have to know the difference to use Star Base--just experiment. In fact, you may learn a lot by experimenting with this program!

You select the projection by clicking on the Map menu and then **Select map parameters**. From the same resulting dialog box, you can select the projection frame and the grid frame. These determine the reference points for your map, which can be the equator of the earth, the galactic plane, the plane of the earth's orbit (the ecliptic), or your horizon.

Note: the horizon option won't appear unless you have specified your latitude, longitude, and time using the **Set horizon frame** function under options on the main menu. Watch the format for date, and you'll have to calculate Universal Time or Greenwich Mean Time.

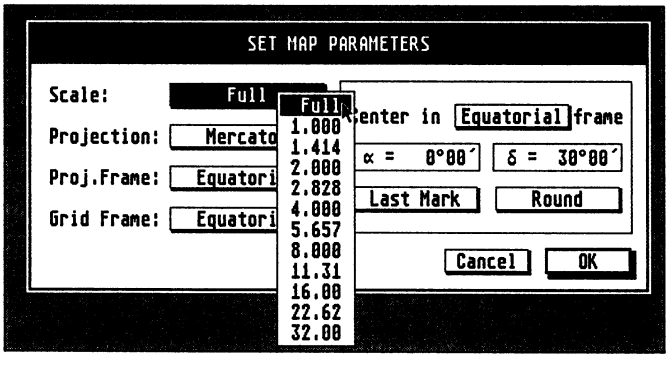
All of the coordinate systems resemble latitude and longitude on earth, but the zero degree latitude line (which is the equator on earth) can be the ecliptic (the apparent path of the sun), the galactic plane, your horizon, or the celestial equator. With *Star Base,* you can actually display a map in one reference frame and overlay the grid from another reference frame! You also need to specify the center point for your map; in other words, what coordinates will be in the center of your screen.

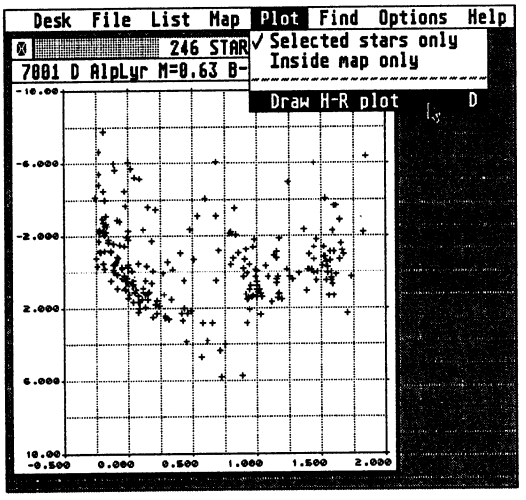
Know Your Coordinates?

The symbology here could be a little confusing for a novice star gazer. The equivalent of latitude and longitude in these systems have different names, and different Greek and Arabic letters are used to represent them. For instance, in the equatorial system "longitude" is right ascension, represented by the Greek alpha, and "latitude" is declination denoted by delta. In the horizon system it's A for azimuth, and H for altitude. Entering angle coordinates is somewhat inflexible in order to avoid mistakes. A plus or minus sign is allowed only in the first position, and all number positions must be filled in, even if they are zeros. *Star Base* will let you know if you did otherwise. Obviously, you need to know something about coordinate systems to master this program. The other option you have in map parameters is scale.

Drawing Your Map

Clicking on **Draw map** will put you in the map window, and you can watch the stars populate the map one by one, using different symbols to represent different magnitudes (unless you specify otherwise). If you previously clicked on **Selected stars only**, then only the subset you selected will be drawn. When the map display if complete, clicking on any star will reveal information about that star in the information line of the map window. If no star is at the exact





point of clication (how about that word!) the information line will display the coordinates of that point.

The sun, moon, and planets can be added to the star map if you choose.

Selecting **Plot** from the main menu allows you to create an Hertzsprung-Russell plot of absolute magnitude versus color for selected stars. If you have previously drawn a map, you can elect to plot only those stars on the map. You can also click on stars in this mode to display information about them.

Using the **Find** function of the main menu, you can specify a star's catalog number or name and have it highlighted in the currently active window. Partial information is accepted.

Star Base wasn't really intended for the beginner stargazer. Although the manual is well written, and the program has an on-line help manual, some of the basic concepts and terminology of astronomy are needed to fully utilize and appreciate it. But--with a little effort or a lot of experimenting, even a novice can use it and learn a lot in the process. For those with the background to fully understand this program, it fills a need which I have not seen in any other program of its kind. And it does so in a polished professional way that we have come to expect from Andrzej Wrotniak. (After all, when you review other software, you'd better be good yourself.)

The list price is $43 from Debonair Software, P.O. Box 521166, Salt Lake City, UT 84152-1166. Price includes one free update. Andrez has produced a freeware version of the program with some of the functions disabled, but it's enough to get the feel of the program.

(Gary Purinton is a planetarium director in Fairfax County Public Schools, and has been using Atari computers since 1982.)

[Note: **Star Base** ($43) and **El Cal** ($44) can be ordered from Current Notes, 122 N. Johnson Rd, Sterling, VA 22170.]

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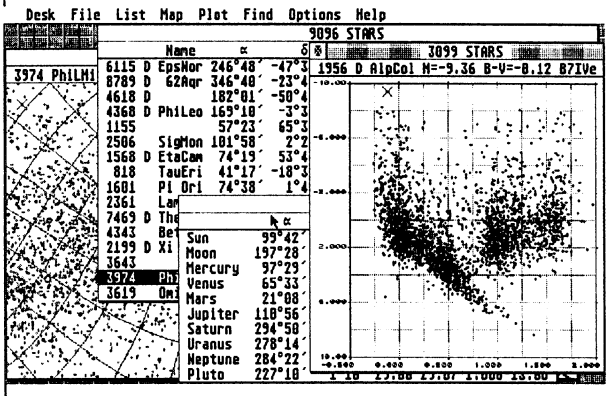

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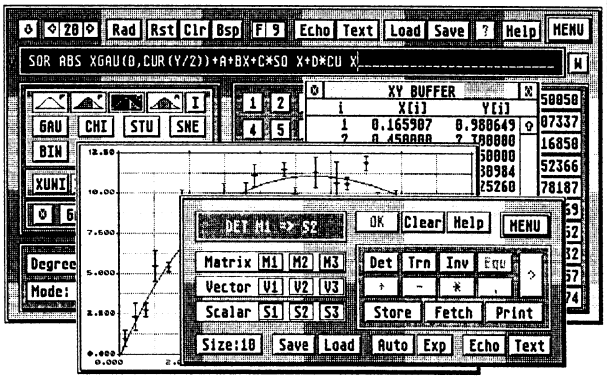

Both programs run on any ST or Mega, color or monochrome (Star Data requires 1 MByte). MoniTerm and TOS 1.6 OK. Prices include one update.

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Small World (Continued from p.21)

Color is handled by changing the phosphor. Instead of one type of phosphor sprayed on the glass that gets lit up, there are three different colored phosphors of red, green, and blue. Every "dot" on screen is composed of three smaller sub-dots of those colors. We then aim the electron beam a bit more precisely; instead of just hitting "the dot," we hit the "sub-dot(s)" required for the color we want. Any art student will tell you that any color can be constructed out of these three colors. The overall dot then ends up glowing as the shade of color constructed out of these mixtures. Since we have to hit the dots simultaneously, three electron guns are required, and that's one reason color is more expensive than mono.

Monochrome is an on-off affair; colors can't be done this way, as shades of the three R-G-B colors are needed (and that's why it's called an RGB monitor!). Hence the Atari transmits a level of intensity to the electron gun rather than a simple lit/unlit.

Sure, it is possible to do shades of monochrome; many computer manufacturers, notably Apple Mac and NeXT, offer "greyscale," which is just technese for "levels of intensity in monochrome." NeXT uses it effectively to give a neat 3-D effect to their software. And optical scanners (like MiGraph's hand scanner) often give greyscale results back. Atari offers greyscale in the TT machine.

Also note that a color monitor is inherently not as "sharp" as a monochrome monitor. Your image is made up out of discrete dots of color, with blackened-out unused colors in between, rather than simple monochrome dots that can be allowed to "blur together." This is why monochrome monitors are very often preferred for any precision monitor work, and why I use a monochrome monitor for writing. Even my wife Sandy's Radius color monitor for her Mac, an absolute top of the line unit, looks plain fuzzy in text compared to the monochrome Moniterm unit; I can tell you which monitor gets used for every day work, and which monitor gets used for color image processing! Keep this very, very much in mind if you're considering a monitor purchase for the Atari; if you're doing lots of text work and not much color, the color monitor might not be a good choice, even as good as it is.

The **refresh rate** is simply how many times per second the image is scanned onto the screen. This is important because, in a fixed image, if the phosphor fades out before it's repainted, you get a on-off-on flicker. This "flicker" will drive you right up a wall, and deservedly so! It causes eyestrain and other problems in a big way. Many European countries have passed laws requiring video monitors to refresh at least 70 times per second; back in the 8-bit days, 50 times per second was common, and left bitter memories.

Interlace is something you and I don't have to worry about in the Atari world, but is a term used a lot. Imagine that your computer just can't shove out the amount of data needed to switch (let's say) a 640 (dots) x 400 (horizontal scan lines) display. So let's, errr, cheat. Let's do scan line #1, then scan line 3, 5, 7, and so forth, for all odd lines, on one refresh, then do the even lines (2,4,6) on the next, then do the odds again.

This results in a display, all right, in which every component is effectively refreshed 35 times per second (half of 70). The computer thus only has to output screen data at half the speed (35 per second) as opposed to full speed. This is incredibly visible to the eye and is really hard to bear; if you want to get a rise out of an Amiga owner, ask him if he likes "flicker mode" on their machine. Companies make big dollars selling "flicker fixers," which just do monitors the way they should be done in the first place.

You people who are going to buy an IBM clone: *Find out if the monitor is interlace or noninterlace.* If it is interlaced (particularly in so-called "VGA" or "Super VGA" monitors), then I strongly urge you to sit and look at a monitor, read text on it, and so forth, bring aspirin for the headache and eye strain you might get, and see if you can stand it before making the purchase.

Believe it or not, everyday American TV is interlaced. The Atari 800 is an example of getting the most that a regular TV can produce; that 40 x 24 display is the best a regular TV can give you. To get, let's say, 80 characters of text in a row that are readable, you must go to a non-American TV standard, e.g., a computer monitor. The Atari 800 gave you 320 x 192 in maximum resolution mode ("graphics 8"); the Atari ST gives you 640 x 400, four times the dots (twice as much both horizontally and vertically) on its display. There's no way a TV can handle that.

However, note that Atari DID give us an ST "Low Resolution" mode, of 320 x 200--which as you see, a TV can handle perfectly, and an adapter, called an "RF Modulator" (which just transmits the dot information on a TV channel frequency rather than directly, so you can tune to channel 2 or 3 to receive), so that you could use the ST on a regular TV, admittedly with a lot less on the screen.

Persistence is how long phosphor stays lit up after you hit it with electrons. There's a delicate compromise here; let me illustrate it by example. Let's say you're refreshing at 70 times per second. If you use a phosphor that fades in 1/1000 second, your screen is only going to be lit up 70/1000 of the time, only at the instant the electron beam is hitting that dot. So your screen looks really dim, because percentagewise, almost all of the time, it's off! That's no good;

people love bright, "vibrant" displays, particularly when dealing with color.

On the other hand, let's go to a 1-second "persistent" phosphor. Try moving the mouse around. It leaves a "trail" behind it as the phosphor slowly fades out. Worse, try to do any scrolling text in word processing; you have to wait after each scroll as the old text on a line fades out, and the new text "burns in." It's terrible--a real smearing effect.

Atari has done a fine job on both their color and monochrome monitors, setting them to non-interlace, to a good persistence level for brightness yet without smear. I've said it before and I'll say it again--the Atari video displays, particularly at the price they are, are one of the great bargains of the age. If you don't think so, go type on an Amiga set to flickermode 640 x 400 (which is the only way you can get that high a resolution), and thank your lucky stars you don't have to buy a flicker fixer just to use your machine.

For those of you who are Amiga fans, I can only say I own one, and I've paid my dues. (Commodore is said to have fixed this in the 3000 machine--FINALLY). Come to think of it, I'll be getting new glasses soon, too ...

Super-persistence monitors keep an image drawn on them more- or-less forever. An example of this would be a Tektronix 4013 display terminal. Here, what happens is that you have the high-power electron gun drawing things, and a low-power gun flooding the screen with energy. If something gets drawn on the screen, the low-power gun gives it enough oomph to stay drawn. The advantage here is that the computer doesn't have to beat its brains out constantly re-drawing the display; the picture tube maintains the display once drawn. Another advantage is that there is no flicker.

A **plasma** display is something you really ought to check out at least once--you'll find them at computer shows, if nothing else. In plasma, you have a fine mesh grid of horizontal and vertical wires, with neon gas between them, on your display surface. To light a dot, you supply voltage to the vertical and horizontal wire of that dot co-ordinate, and can turn a dot off by killing the voltage to that dot. Once you start the dot going, a low-level voltage supply (much like the above) keeps the dot going; apparently, an already-going dot has far lower air voltage resistance than an unlit dot. Such displays are *extremely* pleasing to the eye, as they are bright, do not flicker whatsoever, and offer warm colors. I can recall PLATO using a 512 x 512 plasma display in the 60's and 70's, then switching to regular video; the programmers made a point of sticking with plasma displays whenever they could, going to extremes I can't tell you about because of the statute of limitations!

I saw a plasma display for a Macintosh at a recent MacWorld show, and it was very, very nice.

One disadvantage to plasma is that, due to the time required to "fire up" a dot and get it stable, the display is rather slow by picture-tube standards.

Video Memory

So, we've found out the computer is repeatedly sending a video image to the monitor, over and over, many times per second. How does it do this?

Well, basically there's a wire from the computer to the monitor, that at any point in time has a voltage on it telling the monitor whether or not to display a dot (or in color, the intensity of the three base colors).

But what feeds the wire?

See, there's a LOT of information on that screen, and the computer has to remember it in order to display it over and over; unlike the super-displays I spoke of a minute ago, your ST monitor can't remember dots by itself. So we come to a section of computer memory called "video memory," or "video RAM" (RAM is an acronym for readable, writable, good-old-memory. What the words stand for is confusing). Anyway, you have a lot of things in your ST's memory--operating system, your program, the data you have typed in, music waiting to be played, and something called video memory. In video memory is kept a detailed picture of what should go on the computer screen. When the monitor needs to output the display again, the computer goes to video RAM, grabs the picture, and feeds it to the monitor over the next 1/70th of a second to draw the display. And it does this over and over.

Now I need for you to make a conceptual leap. When the Atari wants to draw to video, oh, let's say, when it wants to display a disk directory after you double click on a disk icon, *it just changes video memory inside itself. It does not draw to the monitor. It draws to video RAM!!*

I emphasize this point because it is one people have a lot of difficulty with. The plain fact is that to the Atari, memory is memory is memory. It doesn't care WHAT memory is used for by the outside world; in fact, judging by my debugging session, it doesn't care about the outside world at all! All the Atari is doing is following its program to write some information into RAM; that RAM just happens to be video RAM. When it writes data there, the next time the monitor needs to be refreshed (always pending, 1/70th second later, and almost always in-progress), that data shows up as video dots.

...To be continued in March...

[Next month, Dave will discuss the burden of video memory and the how the CPU interacts with static and dynamic RAM. This will have a definite impact on how useful an "accelerator" is in speeding things up. -JW]

Cult Computer

Atari as Cognitive Dissonance

by Mike Heininger (c) 1990

No More Routine Recommendations?

Even with *Current Notes* writers' reputation for telling it like it is, how disturbing to read editor Joe Waters' November editorial testifying he told the Atari president at the Washington Atarifest that while he used to routinely recommend Atari computers, he "couldn't do that anymore."

Waters said the problem wasn't with the computers, but with having only "one or two dealers in the area where you could buy the computer."

That's like being told your kids are ugly. You love them, you emphasize their other virtues, but the truth hurts.

Joe's comment made me realize I have evolved into the same position regarding my Atari 1040ST. I routinely take a look at the latest comparable computers, including IBMs, IBM-compatibles, Macintoshes and Amigas, and still prefer Atari. But has my objectivity faded? Has (gasp) Atari become cognitive dissonance?

Justifying Purchases Afterward

You remember our friend Cognitive Dissonance from communication classes. Good ol' Cog Diss is our justification of purchases AFTER we buy them. This is because what we own reflects our personal taste and intelligence. IF we buy a product that falls apart or other people mock, we look stupid. Naturally, we hate that. So we spend extraordinary time and effort assuring everyone who will listen what a fine thing is this latest gizmo we purchased.

Even considering the new lower-priced IBMs and Macs and all the VGA excitement, if some super store that had all the competition lined up and operating with comparably priced options, Atari probably would be chosen by more than enough people to keep the company highly competitive in the United States.

But if consumers don't know Atari exists (or think it's just a toy), and competitors are mugging home computer pedestrians, guess which computer is going to have its zealots acting like martyrs and mumbling that line from Henry V: "We few, we happy few, we band of users!" (or something like that).

Join-the-Cult Macro

Like it or not, Atari owners don't have to skulk around dank catacombs to join our very own cult -- our beloved computers come with a built-in join-the-cult macro. Atari computers certainly fit cult and fad definitions from *Webster's New World Dictionary*. "CULT--2. devoted attachment to, or extravagant admiration for, a person, principle, etc. esp. when regarded as a fad"; FAD--"a custom, style, etc. that many people are interested in for a short time."

Successful products, including computers, go through three stages: best buy when creator-marketed, evaluator-recommended, and user-defended; alternative when creator-marketed and user-defended; and cult when only user-defended.

In the United States, in spite of little bursts of marketing and recommendations, Atari has always been foremost a cult computer. Even when the Atari 1040ST was a miracle machine compared to the competition, finding one made you feel like Indiana Jones. For example, toiling along in 1986 on my trusty Kaypro 4-84 CPM (which had been state of the art in 1984), I was happy but felt that somehow I was missing out on something better.

Ultimate Low Key Store

One morning I saw a mysterious ad extolling something called an Atari 1040ST. During lunch hour I ventured into a questionable section of Washington, D.C. to investigate. The rundown store had bars on the street-level windows; nowhere did the sign say anything about computers. Inside, an ancient oriental shopkeeper (hey, I am not kidding about this) nodded when I asked about the ad. He shuffled into the back room at a pace that made Tim Conaway's old man look like Native Dancer. About an hour later he emerged carrying (don't ask me how) a large sealed box.

Then a house painter's van pulled up outside and a buoyant young man bounded into the store. "Oh, yeah," he said, helping the old man unpack the box and set up the Atari, "this Atari is really something. Watch this!"

He whipped out the mouse and dazzled me with the Neochrome paint program bundled with the Atari 1040ST. Such spectacle! And dropdown menus! You mean files can be copied that easily? And a built-in MIDI connection! For that price! You must be kidding!

I was hooked but broke. But I couldn't forget Atari. Driving down the "blue highway" near home, I nearly passed by a little startup business that was (yes, really!) an exclusive Atari dealer. After breathless demonstrations of *1st Word* and

F-15 Strike Eagle, I ignorantly committed to buying an Atari 1040ST system even after the owner candidly admitted his prices were a little higherbecause he was going to offer such great service.

Within the month I was spared because his store could not get the credit card established that I needed to use. Not much later he was out of business. Meanwhile, I fast-forwarded to another Atari dealer called L&Y where I have lived happily ever after.

Almost Happily Ever After

Well, almost happily ever after. I mourn the dwindling ability to defend my choice of computer. My cognitive dissonance is acting up again and I don't want to discuss it. In medical terms, why go to the expense and risk of an entire work-up when the symptoms are so vague? If my case of Atari is terminal I'd rather not know about it, thank you.

I feel somewhat like the legendary kid after the Black Sox scandal in that long-ago World Series, "Tell me it ain't so, Joe!" Tell me you didn't tell the Atari president you can no longer defend our beloved computer.

And most of all, tell me that this new president, the knight who was supposed to restore the U.S. Atari market, didn't leave Atari!

Right now my Atari life support system hangs by three noteworthy intravenous tubes: L&Y, *Current Notes*, and the Woodbridge Atari Users Group. Some other comforts, such as secondary MIDI sources, have gone out of business, as have some ST magazines.

But a hard core of Atari developers and dealers continues to hang tough, and some excellent British Atari magazines (e.g., *ST Format*) are picking up the slack in the U.S. Atari magazine market (where *Current Notes* has always been the best source of information).

> ...Tell me you didn't tell the Atari president you can no longer defend our beloved computer....

Come to think of it, with the European Community in 1992 supposedly destined to relegate the United States to second place in global markets, perhaps Atari's emphasis on Europe is merely a preview of things to come.

Meanwhile, in the United States at least, Atari users continue to take comfort in the assurances of fellow disciples who insist that Atari still compares favorably to competitors at the office as well as at home.

For if Atari is not the hula hoop of computers, neither is it the hydrogen-filled dirigible, Edsel automobile, or Beta videotape. If our luck holds, Atari cult members won't have to bicycle around neighborhoods to spread the word. Sooner or later like-minded people, unfulfilled with conventional offerings, eventually will find us.

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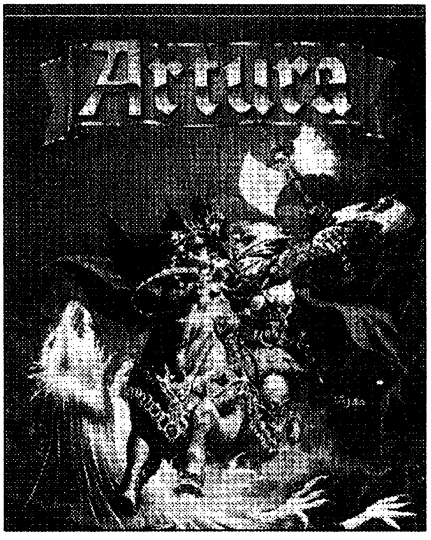
Artura

A Hero's Adventure in the Land of Albion

Reviewed by Joe Sapienza



"Son of a ..." No, not profanity. Just insert the name of a profession and make it a statement; "Son of a preacher man," "Son of a movie star," "Son of a president," etc.... With each statement comes a certain duty and responsibility. Sure, it's stereotyping, but hey, that's life. So begins my preface of Artura, the action adventure game. Artura is the son of the Pendragon and, as such, must accept the quest to rescue Nimue, the beautiful apprentice to Merdyn the Mage.

History Lesson. The setting of this game is in the land of Albion, at the time of its ravaging by the Saxons. To repel the attack of the invaders, the Pendragon must unite the Chieftains of the warring tribes of Albion under his leadership. To do this he needs to have the sacred Treasures of Albion in his possession. Merdyn the Mage, his friend and advisor, knows where the Treasures are hidden, but he has vanished! It is then up to Merdyn's beautiful apprentice Nimue to penetrate this mystery. The Pendragon's step daughter, Morgause, reveals her true purposes of chaos and destruction by kidnapping Nimue. This action prevents the coalition of the chieftains, thereby furthering Morgause's plans. It is up to the Pendragon's son, Artura, (that's you!) to rescue Nimue, thereby gaining the necessary knowledge to find Merdyn. It is into Artura's evil half-sister's stronghold that you must quest to find and free Nimue, and get eveything on track to save the kingdom. (Whew!)

While not stated in the eight page manual, this background seems to stem from a wee bit of history and a peppering of Celtic folklore. I base this opinion on my own knowledge and if this forthcoming definition is not the one the software writers intended, I apologize. Since no background was given, and the pieces DO fit, this one should suffice. The Celts, or Kelts (depending on the translation you subscribe to) comprise primarily the Irish, Scots Gaelic, Welsh, Cornish, Manx and Bretons. Some of their folklore refer to a ancient magical and military order of adepts called the Dragon Kinship, whose head authority held the title of the Pendragon. This order was responsible for the well being, welfare, and the quality of life and spirit of the Kelts. I'd guess that since the Pendragon was busy uniting the Chieftains, it befell his son to do the rescuing. Ergo, the stereotype of the "Son of a Pendragon" – A HERO!

The maze of passages and corridors of Morgause's four level castle apparently was designed to repel the intrusions of visitors, Pendragons, and Pendragon's sons. Whether this is due to the fact that she is, after all, an evil half sister or just that she has bad breath (or both ...) makes it pretty hard for your quest to have much success. Each level is chock full of Morgause's "weird and wonderful" minions. This quote from the manual seemed strange to me. The "weird" was understandable but I found nothing "wonderful" about dying time and again, when meeting these denizens. Various powerful warriors, ghouls, spiders, giant rats, hawks, and bats attack in a never ending tide. Each level seems to have assailants indigenous to that area. Deadly traps, pits, and one way passages add to the game play in a most frustrating manner. Refer to figure one (1) for a representation of the (required) color monitor's play screen.

Help for the Helper. You have at your disposal a never ending supply of throwing axes to clear a path through the attackers. Creatures such as the hawks, bats, spiders, and rats can be exterminated with a single ax. Lizard men require two, guards four, and some of the more powerful monsters take a continual barrage of axes to be vanquished. When sent back to the underworld, these larger attackers sometimes leave goodies for you to pick up. One such goody is food. Another is a piece of one of the six Rune Stones.

Bad News Can Rune Your Day. Hidden along the way throughout the four levels of Morgause's dungeons are the shattered pieces of the six magical Rune Stones. They can be found as stated above, or randomly strewn about the levels. These Stones were stolen by Morgause (the woman obviously kept busy!) and it was her evil touch that destroyed them. The power of your alter-ego, being a supporter of truth, justice, and the Albion way (right train of thought, wrong story...) is such that collecting the fragments of the Runes reassembles them. Selecting completed Runes allows you to ride the Mystical Wheel of Cerriddwen. The Kings of old used this ability to transport themselves around the land. You will use them to move around to various spots within the castle. It is not stated where any piece, once reassembled, will take you so it's a "try it and see" approach. To activate

a whole Rune, depress the "R" key. This will pause the game and produce a hand cursor on the screen that you manipulate left and right to select the desired Rune. Pressing your joystick button repeatedly over the Rune causes it to spin, which effect carries over to the play screen. It blanks out black and white and begins a spiral effect. After the roughly five second duration, Artura is deposited at another position in the stronghold. Needless to say, your adversaries are ready and waiting in full force regardless of where you transport to.

An Apple a Day Keeps the End of the Game Away. In this game, Artura has only one life to live. (I wonder if he had soap operas in his time...) An energy bar is situated under the game play area, and decreases a small amount for each contact with the villains of the game. There are also ground based defenses which will sap your strength, such as pointed spikes and poisonous grass. Finding or winning caches of food will replenish Artura's energy bar to full. Completing the assembly of a Rune will also top up your energy. A depleated energy bar or depressing the [RESET] button will end the present game and return you to the High Score/Demo mode.

A Prize in the Package. Artura comes in a standard software box with an artist's fantasy representation of your alter ego battling with a giant rat on the front. The back of the box shows the obligatory screen shots from various computers. Besides the afore-mentioned manual, the package contains a (roughly) 33 by 20 inch mapping of the four levels, complete with doorways, second stories, and stairs. Each portion is set to a numbered grid; the last page of the manual gives the coordinates of Rune pieces and food caches if you need help and/or do not wish to map your progress.

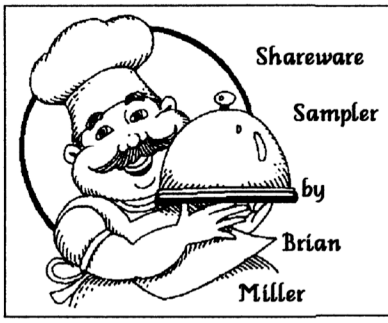
Sounds from Below. The sound effects of the game, while minimal, are appropriate and do not deter from the game play. An ax hitting home, and a creature's death squeal are among the few you will hear. An interesting ditty plays throughout the game, but can be toggled off and on with the F1 key. Personally, I liked it, as it kept the game's atmosphere going. There was plenty going on with the waves and waves of Morgause's minions attacking--I'm not sure whether it calmed my nerves, or added to the anxiety!

Into the Melee. The game auto-loads upon turning on your ST. A picture of average detail and graphics holds your screen (and hopefully your attention) while the game loads. A short typed synopsis of the game is given when the loading is complete, preceding the game play. If a joystick button press is not detected, the program will go to a high score screen, and then proceed to a demonstration of the game. The demo is valuable, as it shows how the game play works. Let it run its full gamut or not; a button press cancels it and starts the play. Moving your joystick left or right will move the sprite correspondingly; straight up or either of the "up" diagonals will cause Artura to jump in that direction, and a downward pull causes him to kneel. Any of the eight joystick positions with the button depressed will fire an ax in that direction.

"An Action Adventure"? The game is advertised as stated above. In essence, this is correct. I must admit though, it was not the type of game I envisioned when I read the back of the box. Action? Most definitely, and relentless too! Adventure? Well, here's where the essence comes in, as the game starts out hard and gets harder. There is NO game save ability, which I feel kicks this program out of the ball game. The frustration factor is high; I "died" so often without getting very far, that if I weren't reviewing the game, I wouldn't have continued trying. To map your progress, which tends to be part of adventure games, is difficult to accomplish. This is, again, due to the continual barrage of attacks. The "R" key, used for accessing the magical Runes/game pause, would probably get worn out in short order! However, I must commend the programmers for the inclusion of the maps and coordinates. I think this allows the buyer to make his/her own decision as to how many aspects of the game play he wishes to explore. Nice touch!

To Travel to Albion. Is this game for you? I have tried to point out some pluses and minuses to this game, but as in most cases, "to each his own." I don't think I will be Nimue's savior! The "seemingly endless stream of [Morgause's] weird and 'wonderful' minions" got the better of me. Even with the thoughtfully enclosed map, I've yet to complete this game. I have finally reached level four, and reassembled all of the rune stones, but can't get past this point in the game before I get killed. As his last ounce of strength is depleted, Artura changes form into an eagle and flies up to the heavens. ARRRGGGH! If it had started at an easier level and worked up, I'd have been inclined to fight it out. Or more importantly, if the programming had incorporated a game save facility, I might not have minded the frustration. It is my belief that programmers should always have a "SAVE" feature; it gives players the option to use it or not, depending on the challenge level at which they want to play. If, on the other hand, this type of non-stop action is right up your alley, the game's graphics and sounds have what it takes to give you quite a few hours of game play. Check around your local users clubs, or if you're fortunate enough to have a dealer in your area, "try before you buy."

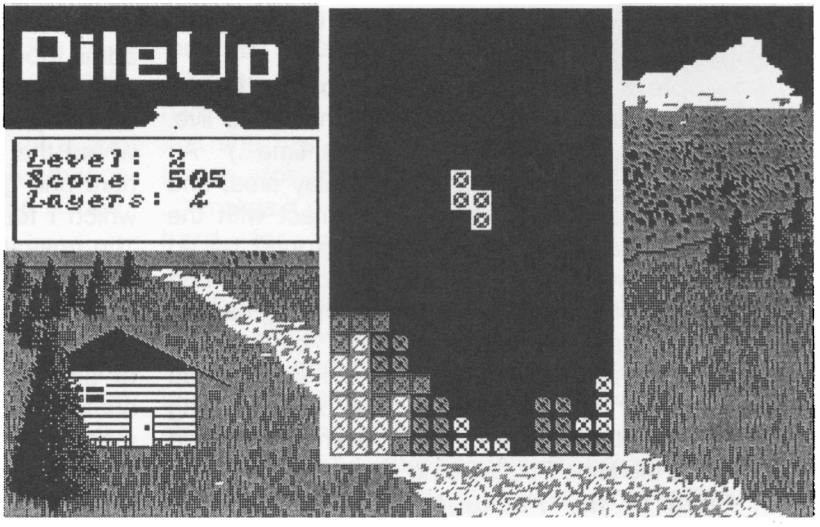
[Artura, $39.95; Arcadia, division of Virgin Mastertronic; 18001 Cowan, Irvine, CA 92714 Tel. 714-833-8710]



Pileup, ST Tetris, Stargame, and the Damanoid Budgie

I am finding it a struggle to complete this month's column. As I write this, my family is reluctantly packing away Christmas decorations for yet another year. While we welcomed Santa's annual arrival, we were not at all happy to be visited by a nasty stomach flu. One by one we have fallen victim to this nasty bug. I had my turn yesterday. Thank goodness I no longer need to pray before the Porcelain God, but I am left with about as much resilience as a limp wash rag.

Given my depleted physical condition at the moment, and my need to cheer myself up after saying goodbye to another Christmas Season, I thought it would be a good idea to make mention of a few of the many games which are available in the *Current Notes* Library. I will focus on arcade games which provide you the same action, and perhaps superior graphics either for free, or for a fraction of the cost of their commercial arcade equivalents.



#390D-Pileup

by Russell Noll

PileUp provides the ST gamester with an excellent rendition of the now very familiar Tetris game. The object of the game is to guide the falling shapes down the screen and fit them together as closely as possible. You can collapse rows and move on to higher levels of the game by filling in all the spaces. The game ends when the blocks reach the top of the play screen.

Like *Tetris*, *PileUp* includes a scenic background to game area itself. It gives you the choice of playing to music or without. The game makes use of the joystick. You can move each piece left or right my moving the joystick in the equivalent direction, and you can drop a piece by moving the lever downward. You can rotate a piece by pressing the fire button. Finally, you can quit by pressing [Ctrl]+C.

I found the game to be enjoyable to play, and certainly worth the meager $5.00 registration fee. The author does warn that the game does not work with TOS 1.4 installed.

[**NOTE**: #390 has been replaced by #514, PileUp Version 3.1, pictured above, which does work perfectly fine with TOS 1.4 –JW]

#419-ST Tetris V1.0

by Michael Jenkins

If you don't have a joystick for your ST then *ST Tetris* is the game for you. This game will give you the same enjoyment as *Tetris*, with the use of keyboard equivalents to position the falling blocks. The J and L keys are used to move the shapes right or left. The K key will rotate a piece, and the space bar is used to drop a piece into place.

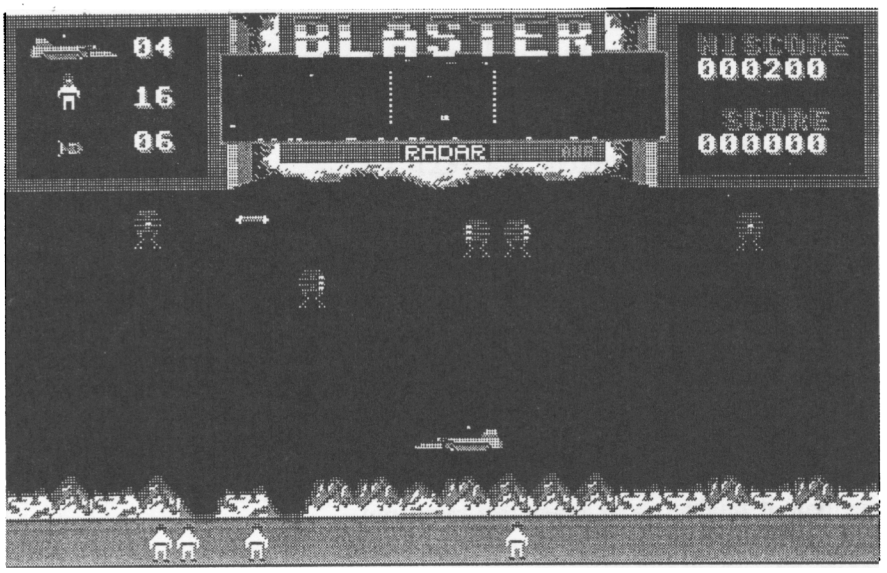
This game does not provide a scenic background or music, but it can provide you a similar challenge to *Tetris* or *PileUp*.

Space Invader type arcade games abound for the ST. A few to mention are:

#419-Blaster

by A. W. Brook

The object of *Blaster* is to prevent your men stationed on the ground from being "grabbed" by the alien grabbers. You are equipped with three ships which you can use to shoot the grabbers and keep your men from being abducted. Your ship can be used to blast the other aliens and to earn points. The screen scrolls horizontally and you can adjust the altitude of your ship by moving the joystick lever up or down. You can reverse the direction of your craft by moving the lever left or right. You can blast the assorted aliens by pressing the fire button of your joystick. You should be warned that the aliens also fire deadly projectiles, and colliding with them also destroys one of your ships. If



makes use of the joystick like the other space games already mentioned. The game follows the space invader theme fairly closely in that your task is to zap descending alien forms before they hit you. You not only need to have a quick firing response, but you need to be able to discern the good guys from the bad. Like *Blaster*, *Damanoid* left my screen unreadable after ending the game. However I found this is a minor inconvenience, unless I had engaged my hard disk drive.

Since the young lady is a bare-breasted beauty, I would hesitate to recommend this game to those with younger children. However, if you can keep *Damanoid* safely tucked away from your impressionable seven year old then this game promises quite a challenge.

I have found playing these games to be good medicine, equal to at least two doses of Pepto-Bismol. Perhaps my energy will return next time in order for me to take a close look at a serious program, but after all, what good is one's ST if it can't be used to provide a bit of good, if not always clean, fun?

all else fails, you can press the space bar to destroy all the surrounding alien forms, but this option is limited to four times initially.

Blaster includes a radar screen at the top of the play area to help the player see where the aliens are. This feature gives you at least a fighting chance to spot the aliens, mutants, mines, and alien projectiles before they spot you.

The sprites, sound, and challenge of the game are all above par. The *Blaster* game provides a directions screen, giving you all the necessary information needed to play and quit the game. *Blaster* also provides a separate screen depicting all the alien forms and their equivalent worth in points

#419 Stargame

by Mike Hughes

This game follows the space invaders theme fairly closely. As the game begins you are stationed on the ground. The joystick moves you right or left, and the fire button is used to zap the columns of invaders. The game is quite challenging since the columns of aliens move rather quickly and fire at you incessantly. I generally manage to begin and end a game within a minute. *Stargame* provides an instruction screen with all the necessary information you will need to play. *Stargame* is a worthy adaptation to the Space Invaders theme. When I played *Stargame*, at least I found that my screen was not returned to its original condition upon leaving the game. I was able to restore the screen by choosing the change screen resolution option from the menu bar.

#282-The Damanoid Budgie

by C. Martens

This game is also a shoot-em-up space arcade game complete with digitized sound, colorful sprites, and a quite delectable woman who pops on to your screen at strategic points during the game. *Damanoid*

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by
Frank E. Kweder

Sinewave

Source? I think it was from either an Alfred Handy Guide on Atari Graphics or A Tricky Tutorial on GTIA. Anyway, I added Larry Nocella's ML rainbow to see how it might work in GTIA. It seems the rainbow only works in the background color. The rest is peculiar--but interesting! Press START repeatedly to cycle through 3 states: the weird mode, the 16 colors, the background rainbow (always the same). Apparently, you get bands of Gr.8,9,10 and 11 all at once.

```
30 REM PRESS START TO CHANGE
40 GRAPHICS 9:SETCOLOR 4,14,0:DEG :J=-1
70 FOR X=0 TO 79
80 COLOR ABS(INT(15*SIN(9*X)))
90 PLOT X,20-(INT(19*SIN(9*X)))
100 DRAWTO X,160-(INT(19*SIN(9*X)))
110 COLOR 5
120 PLOT X,161-(INT(19*SIN(9*X))):DRAWTO X,191
130 NEXT X
200 DIM RB$(20):FOR A=1 TO 20:READ M
210 RB$(A)=CHR$(M):NEXT A
220 DATA
104,104,104,168,232,142,10,212,138,153,18,208,169,6,205,31,208
,208,241,96
230 X=9
240 Z=USR(ADR(RB$),X)
250 X=8:POKE 53279,0:FOR Z=1 TO 80:NEXT Z
260 Z=USR(ADR(RB$),X)
270 POKE 53279,0:FOR Z=1 TO 80:NEXT Z
280 IF PEEK(53279)<>6 THEN 280
285 POKE 53279,0:FOR Z=1 TO 80:NEXT Z
290 J=J+1:IF J>15 THEN J=0
300 SETCOLOR 4,J,0:GOTO 230
```

Mcarpet

Graphics 3 adapted from an Apple program most probably in Creative Computing. A fast moving kaleidoscope decked out as a magic carpet.

```
10 GRAPHICS 19:V=2:G=8:D=2:POKE 711,252:SQ=23
11 DL=PEEK(560)+256*PEEK(561):POKE DL+3,71:POKE
DL+6,6:K=PEEK(87):POKE 87,2
12 ? #6;" magic carpet":POKE 87,K
13 COLOR 2:PLOT 8,4:DRAWTO 8,23:PLOT
31,4:DRAWTO 31,23
14 FOR X=5 TO 22 STEP 2:PLOT 4,X:PLOT 6,X:PLOT
33,X:PLOT 35,X:NEXT X
15 SETCOLOR 0,V,4:SETCOLOR 1,V+3,6:SETCOLOR
2,V+6,4
20 FOR A=2 TO 20:FOR B=2 TO A
30 COLOR INT(PEEK(53770)/85)+1
40 PLOT B+G,A+D:PLOT SQ-B+G,SQ-A+D
42 PLOT SQ-B+G,A+D:PLOT B+G,SQ-A+D
45 PLOT A+G,B+D:PLOT SQ-A+G,SQ-B+D
47 PLOT SQ-A+G,B+D:PLOT A+G,SQ-B+D
50 NEXT B:NEXT A
60 V=INT(PEEK(53770)/17)
65 GOTO 15
100 REM MAKE -magic carpet- IN LINE 12IN-
VERSE, SO THAT THE TITLE COLOR WILL NOT
CHANGE
```

Joytest

I devised this program to test AND to practice using the joystick. You can see, for instance, when going from one diagonal position to another, you will always see CENTER flash on the screen--but you may also see TOP, LEFT, etc. flash on if your positioning is off a bit. It may be your technique or an unsuitable joystick, but this program will help you to analyze the cause. Incidentally, in the program, the number returned by the position of the joystick is the same as the Line number. CENTER=15.

```
1 REM JOY-TEST BY FRANK KWEDER
2 GRAPHICS 18:POKE 708,140:POKE 709,28:POKE
710,6
3 S=STICK(0):F=STRIG(0):COLOR 125:PLOT 0,0:GOSUB
S:GOSUB 20
4 POSITION 6,3:? #6;"JOYTEST!":GOTO 3:REM
"JOYTEST!" IN INVERSE
5 POSITION 14,10:? #6;"lower":POSITION 14,11:?
#6;"right":RETURN
6 POSITION 14,0:? #6;"upper":POSITION 14,1:?
#6;"right":RETURN
7 POSITION 14,5:? #6;"RIGHT":RETURN
9 POSITION 1,10:? #6;"lower":POSITION 1,11:?
#6;"left":RETURN
10 POSITION 1,0:? #6;"upper":POSITION 1,1:?
#6;"left":RETURN
11 POSITION 1,5:? #6;"LEFT":RETURN
13 POSITION 7,11:? #6;"BOTTOM":RETURN
14 POSITION 8,0:? #6;"TOP":RETURN
15 POSITION 7,5:? #6;"center":RETURN
20 IF F=0 THEN POSITION 7,8:? #6;"*fire*":REM
"fire" IN INVERSE
22 RETURN
```

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Wordflair II

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Wordflair // has a suggested retail price of $149.95. The upgrade fee is $50. Through Feb. 15, 1991, users of 1st Word Plus, Microsoft Write, Word-Up, and Word Writer ST may order Wordflair II direct from Goldleaf for half price. Goldleaf Publishing, 700 Larkspur Landing Circle, Larkspur, CA 94939 (415) 461-4552.

Scanners

RIO Computers announces the release of **Geniscan II** ($299.95) and **DAATAscan Pro 2** ($989.95) new hand scanners for the Atari ST/TT systems. Geniscan II uses the DAATAscan hardware and software interface from Pandaal Marketing in England. It interfaces the Geniscan 4 1/8 inch hand scanner to any Atari ST/TT system. DAATAscan Pro is a full 8 1/2 inch wide hand scanner for full page scanning applications. Also available as an option is a sheet feeder ($249.95) to automatically scan full page images.

Both scanners provide a real-time scanning display with 100, 200, 300, and 400 DPI resolutions. The software supports IMG, TIFF, and Degas formats which makes the images compatible with all ART, OCR, and DTP packages. Each scan can be done in B/W (line art mode) or one of 3 built in dither patterns which represent a 64 level grey scale. Other functions provide 5 zoom levels and allow pixel level editing. Any image can be cropped, rotated, flipped or made into an inverse image. Drivers are included for Atari laser as well as 9 and 24 pin printers.

All items are available from RIO Computers, 3430 E. Tropicana Ave, #65, Las Vegas, NV 89121 Tel/Fax (702) 454-7700.

eSTeem PILOT

eSTeem, Inc. has announced a program to promote and support the educational use of Atari ST computers in schools. eSTeem will donate 100 special **eSTeem PILOT** site licenses to schools nominated by computer enthusiasts who purchase an eSTeem PILOT single-user license. PILOT is an authoring language and system for creating and using computer-assisted instruction on Atari ST computers.

eSTeem, Inc. is offering the single-user license for eSTeem PILOT for $99 (plus $3 for s/h), but only for this special program. The suggested retail price of a single user license is $175. Requests for additional information can be sent via email to ESTEEM on GEnie or Delphi, or via U.S. mail to eSTeem, Inc., 72 Shades Crest Rd, Hoover, AL 35226-1014. A demo version of eSTeem PILOT is available on GEnie and Delphi (and in the CN Library).

Grammar Checker

Phil Comeau Software, of Nepean, Ontario, announces version 3 of the **GramSlam Grammar and Style Checker**. GramSlam checks documents for over 1200 common grammar and writing-style problems. GramSlam's readability statistics help the user tailor writing to a particular audience. GramSlam can improve the quality or any written work--memos, letters, stories, resumes, manuals, and business and school reports.

Version 3 includes checks for double words, British vs American spelling, capitalization problems, unclosed parentheses and quotation marks, sentences ending with prepositions, incorrect form and use of "i.e." and "e.g.," punctuation placed incorrectly inside or outside quotations, inappropriate use of contractions.

Version 3 is priced at $39.95 (+$3 S/H). Owners of previous versions can upgrade to Version 3 for $10 (+$3 S/H) before 1 June 1991. For further information contact Phil Comeau Software, 43 Rueter Street, Nepean, Ontario, Canada K2J 3Z9 (613) 825-6271.

PageStream/Calamus Fonts

Dennis Palumbo (516) 352-5606 has released several new font disks. **PageStream Font Disk 3** includes Helvetic Extra Light, Cassion, and Fractions. The **Calamus fonts** released are: Disk 1 (Gallya Ornamented, Kooper Black and Plaebill), Disk 2 (Basketville, Gallya and Decorative Borders), and Disk 3 (Helvetic Extra Light, Cassion and Fractions.) Each font includes upper and lower case letters, numbers, punctuation, foreign and special characters. To obtain a printout of all the fonts, send a SASE to Dennis Palumbo, 104 Barrymore Blvd, Dept. Q, Franklin Square, NY 11010.

Advan BASIC

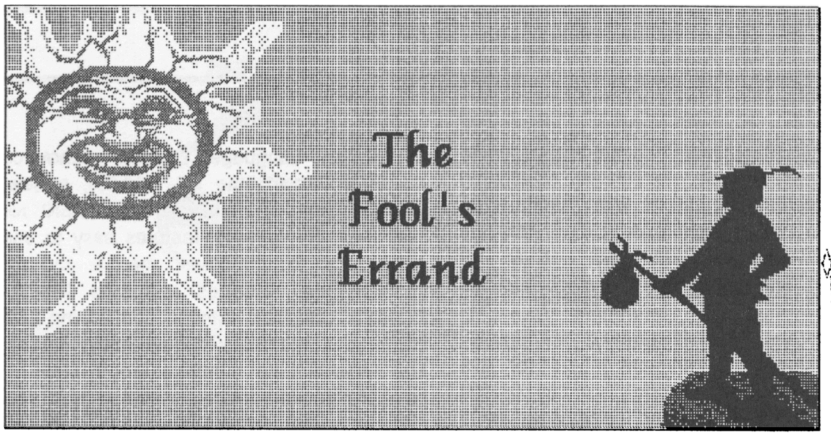
Advan Language Designs announce Advan BASIC for the ST ($39.95), a new, more powerful version of their BASIC for Atari 8 bit computer. It features easy to use commands for windows, menus, mouse, sound, sprites, matrices, and sorts. A built-in editor simplifies entering and editing with commands like block move, copy, search, and replace. Line numbers are optional. It has single and double precision real and integer, WHILE, REPEAT, and DO loops, an EXIT command for loops, block IF, CASE, and multi-line recursive functions and procedures. Decimal string arithmetic (120 digits) allows higher precision and eliminates binary rounding errors. A debug trace mode displays lines as they are executed in a special window, which can also show variables. For greater speed, Advan compiles programs. Running a program automatically compiles and executes it. The compiled code runs without Advan BASIC. For further info contact William Graziano, Advan language Designs, Box 159, Baldwin, KS 66006 (913) 594-3420.

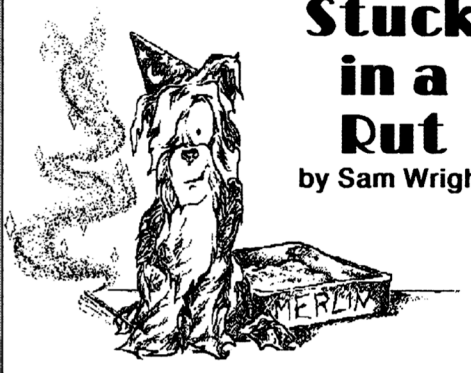
Turbo-816 for Atari XL/XE

DataQue Software announces the **Turbo-816x**, a 16-bit CPU upgrade for the Atari XL/XE computer. this upgrade will add 16-bit working registers, a 24-bit address bus, and numerous new addressing modes and instructions. All this new power is available to new programs written to take advantage of the new CPU, while maximum compatibility with current hardware, and software is maintained. Included with the Turbo-816x is a new operating system PROM, which can be installed to replace your current Atari OS, or using a switch circuit, used in addition to the Atari OS. This OS chip, called the Turbo-OS, provides system calls to take advantage of the new processor addressing.

The Turbo-816 kit for the XL/XE computers lists for $169.00. The 1200XL model lists for $199.00.

Other products from DataQue include **Turbo-Calc**, a cartridged based spreadsheet program for the Atari 800/XL/XE/XEGS/T816 systems ($50); **Turbo-View**, a graphical operating environment, which uses the graphics 0 (antic 2) mode ($30); **Turbo-A8**, an assembler which will run on any 8-bit Atari computer and generate either 6502 or 65816 object code ($20); **Turbo-C8**, a high level language system distributed on a bank selected cartridge to allow all the features of the ANSI C Language ($99). DataQue warrants its products for 1 year on parts (hardware and media) and 90 days on labor. DataQue Software, PO Box 134, Ontario, OH 44862.





Stuck in a Rut

by Sam Wright

It all started with a story--a simple story, really, of a Fool and his quest for 14 "lost" treasures of the world. What it turned out to be was the most original, entertaining, and difficult game I've ever played.

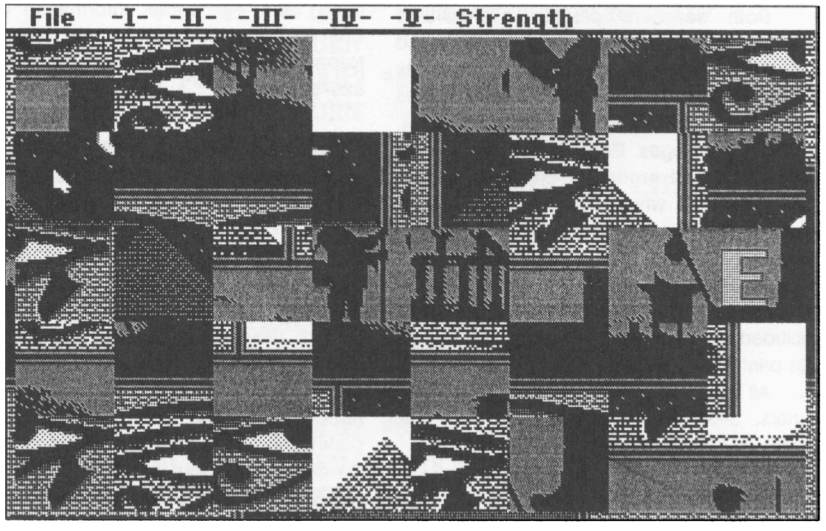
Like all adventure games, solving puzzles is the goal of *The Fool's Errand* (TFE). Unlike most adventure games, however, these are all puzzles you've seen before, whether in puzzle books or the Sunday comics section: magic squares, jigsaws, secret codes, mazes, word finds, crosswords, cryptograms, anagrams, and acrostics. On first glance, TFE seems to be a collection of 56 puzzles lumped together, 21 of which are first accessible by you. It's so much more.

TFE comes with sparse documentation (a 12-page manual, a 4-page system information sheet, and a code wheel), which works to its advantage, since part of the thrill of solving the puzzles is figuring out *how* to solve them. The minimal history and background given of the ancient land of Tarot is vague and sketchy on purpose; through an online story, you figure out what's going on. Though it may not make much sense at the beginning, keep the manual by your side as a constant reference throughout the game. Refer to the strategy section especially. The first sentence, "*The Fool's Errand* offers a challenge like no other," will constantly prove itself as the game gets more complex and complicated. For a greater challenge, don't read the manual at all. Solving the game is still possible.

Four single-sided disks are included, two of which consist of entertaining animation sequences. The first, the prologue, sets up the game and the last, the finale, gives a satisfying conclusion. The finale cannot be played (actually, you sit and watch--a just and satisfying reward after finishing the game) until after you've solved the game. On my version, however, I was able to view the finale without solving even one puzzle. I do recommend saving this for last, though. You'll have something to look forward to. The middle two disks, the game and puzzle disks, are all you need to play the game. The disks themselves are not copy protected and backups are encouraged. Games can be saved directly on the game disks or on separate formatted disks. If you have a double-sided drive, you can copy the two disks to one double-sided disk and have room for four saved games. Attempts at running the game off a hard drive resulted in playability, but I wasn't able to load or save a game--a must for TFE.

Interaction with TFE is mainly through pointing and clicking the mouse. Response is great, except for an occasional quirk while working on the Sun's map. Sometimes TFE would think the mouse button was pressed down, and keep it down. It would go away as mystically as it came (the work of the High Priestess, perhaps). Keyboard input is used when absolutely necessary, mostly at the end of the game when you have no choice but to use the keyboard. There's one diabolical puzzle which calls for keyboard use, but it doesn't seem like it would. I won't say which one. Suffice it to say, the solution makes perfect sense, but only in hindsight.

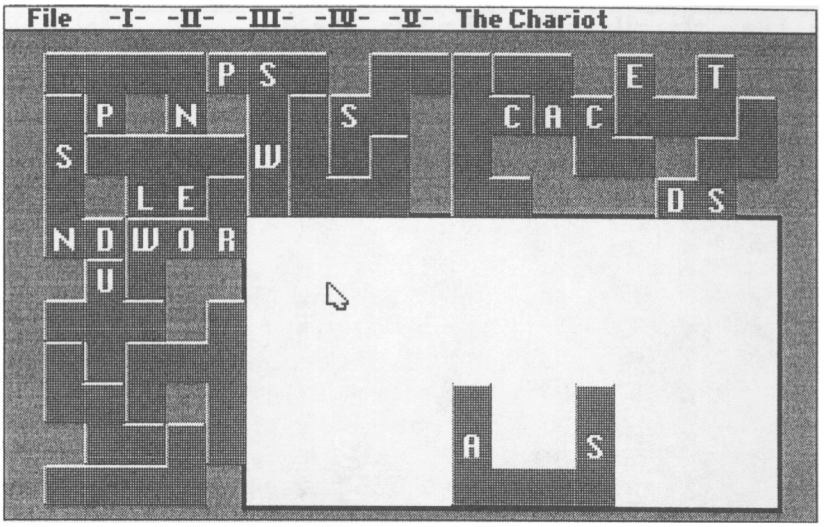
The menus are Macintosh-like and easy to get used to. Even the menu text has a Chicago font flair to it. Two of the selections in the File menu don't work.



One of seven jumbled jigsaw puzzles that will form a picture.

"New" is one of them, "Print Story," discussed later, is another. Selecting "New" will keep on telling you to insert the game disk, even though the disk is already in the drive. There's another devilish puzzle that actually uses the pull-down menus for its solution. I won't reveal that one, either. The thrill of solving puzzles in this game is so great that I don't want to detract from that feeling. Just remember that TFE isn't limited to strict conventions of game playing.

The color graphics are excellent, some of which are enhanced versions of the Dover silhouette clip art series. Sound is minimal and almost startling to hear because of its rarity. You might want to leave it off so it won't break your concentration (then again, an occasional rewarding sound is always appreciated).



One of six jumbled jigsaw puzzles that will form a phrase.

That TFE revolves around the fortune-telling Tarot deck of cards is immediately evident at the first screen of the game, which both familiarizes you with the characters you'll encounter and doubles as copy protection. Three cards are dealt on the screen and a symbol is shown. Using the three-tiered "Wheel of Fortune" code wheel (a pirate's worst nightmare) included in the package, you match up the three cards and symbol, then enter the additional symbols revealed. You have two chances before the game boots you out. The graphics are crisp enough that I had no problem distinguishing what was what or getting through on the first try.

Soon you're presented with text inlaid in a scroll, the beginning of the Fool's story and his quest for the 14 treasures of the world. The evil High Priestess, you see, has hidden the treasures from under the noses of the people of Tarot (presumably, because it was something to do). The only way to recover the treasures and "undo the evil of this treachery" is through the magic of the Sun's map. Trouble is, the map has been corrupted. Pieces are missing and it's out of order. Worse, the Fool has the map.

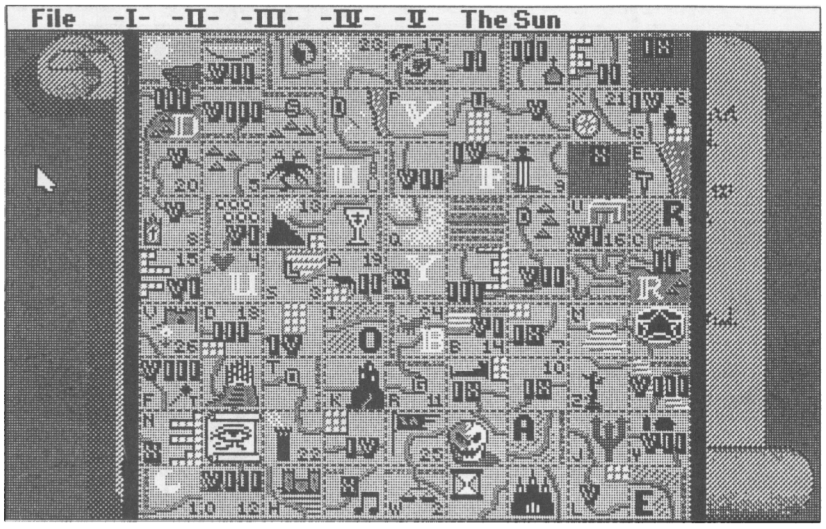
Each chapter of the story contains hidden clues, scrambled words, and secret codes, vital information for future puzzles. But that comes later when you get to the Sun's map (and where the difficulty factor increases). For now, a chapter may contain one of the puzzles mentioned above. If it does and you solve it, you get a piece of the Sun's map, and you get to read another chapter. Starting off, 21 of 80 chapters and 21 of 81 pieces of the map are available to you in a seemingly random order. What you're doing won't become readily apparent until you obtain more pieces of the Sun's map.

Once you have all the pieces of the map (and, hence, all the pieces of the story), the goal is to arrange the 81 squares in a restricted 9x9 grid and put them in the correct order to fully restore the map's magic. This can be done by reading the Fool's story in order this time and finding the map piece corresponding with each chapter. Usually, the text will identify a specific piece of the map. One extra piece is thrown in to fill an empty space.

After the map is reconstructed, you have all the necessary information to identify the 14 lost treasures and scribe them in the Book of Thoth. Easier said than done, because the treasures are still hidden. Using the map will help you locate them (remember, it's magical).

I got through everything before the Sun's map fairly quickly. Once I had all the pieces, though, it took a few months of on-again, off-again playing before assembling the pieces in the right order--it's never taken me that long to solve an adventure game. The type and tone of the puzzles change after the assembly of the map. They're no longer disjointed; each is connected and each relies on the map's powers (and yours for figuring out how the map aids you) to unscramble the disguised treasures. No instructions are given this time around; all the clues you need can be found in the story, which you'll likely read through at least 14 times.

It's a fun 14 times, though. The story, almost 9,500 words, is well-written, frequently funny, and cleverly plotted. It reminds me of a storybook fantasy fairy tale with exceptional color illustrations. The Fool is entirely sympathetic and, believe it or not, changes (in character, not literally) by the end. This is in line with what his ultimate search is for, what he discovers after he finds the 14 treasures. In the File menu an option of "Print Story" is grayed out until, according to the manual, you've reconstructed the map. Having a hard copy of the complete ordered story saves a lot of unnecessary disk access and button clicking, not to mention time. In my version, however, it was disabled the entire game, taking up a lot of unnecessary disk access, button clicking, and time.



The king of difficult puzzles, the Sun's map (scrambled, ofcourse)

Wickedly written, incredibly inventive, and hopelessly addicting, *The Fool's Errand* will keep you glued to your monitor for weeks on end. Unless you want to miss out on one of the most unique adventure games ever released for the ST, buy it! I cannot recommend it highly enough. And good news--rumor has it there will be a sequel.

The Fool's Errand ($49.95), written by Manley and Associates, published by Miles Computing, and distributed by Electronic Arts, runs on all color Atari STs and comes on four single-sided disks. It is copy protected by documentation (at boot-up, you click on Tarot symbols from a wheel) and cannot be run from a hard drive. Saved games, around 11K each, are saved as individual files and can be saved to the game disks themselves. Version 1.0, March 1990 was reviewed.

Some Brief, Nudgeful Hints

Pre-Sun's Map. You think these puzzles are hard? Just wait--they're all preparation for everything that comes after the Sun's map! Each puzzle stands on its own, so you can jump around in a non-linear way. It's not vital to know what you're revealing; for the most part, the clue you reveal will show itself in the next chapter.

Decoding secret code: Isolate articles (a, an, the) and small words (I, it, he, to, we, me) and use them as your reference points.

Fill-in-the-blanks: All are English words.

Playing the game of Thoth: You're on your own for this one! As you play, however, you'll notice what cards belong to what suit and what beats what. Write these down and you'll win every time. Bring on the beer nuts and cigars!

Pressing letters to form shapes: Each time you press a button containing a character, it affects the screen in some way. Your goal is to form a word in the center. Because there's no simple way to document this for reference, press buttons at random until a recognizable shape appears. Note the buttons that formed (or deformed the shapes to form) a portion of a word and isolate them. Start over if you have to. Trial and error works here the best.

Pressing letters to form words: By far the most challenging type of puzzle in this first set. Each button has a rule, but unlike the buttons that formed the shapes, you're able to write the rules down because they change, add, and delete letters. If one button prints, "SE," while another acts as a prefix and prints, "MOO," the order in which to press them is obvious.

Unscrambling words: Note the clue at the bottom of the screen. If you're still in doubt what the word is, randomly move the letters around until something looks familiar. Also, use the highlighted boxes to your advantage; you'll sometimes be able to get that word/phrase before the scrambled words.

The Sun's Map. Sometimes just placement of the first tile can be the necessary clue to get you on your way (in my case, it wasn't). In any event, take into account what the Hanged Man says and apply it to where the first tile should go: "Consider that the TOP is at the bottom of the upper half."

The map is not as devious as it could have been, even though some pieces fit together perfectly when they're not supposed to. What seems to match up (for example, the blocks, the field, the maze, the ocean, the creases) usually does. Use those as starting points.

Then work from the story. The Sun is the first chapter, so the sun is the first tile. Many of the pieces aren't this obvious, but they usually contain some clues in the text as to what could be associated with its tile. For instance, in the second chapter, The Singer, what could pictorially represent singing? Find it and you have your second tile.

If you run out of clues, go with trial and error. The path is one long, continuous path--the only breaks are the beginning and ending. With this information, you should be able to find some generic tiles with just the path on them and match them up reasonably well.

The biggest problem with the map is you can't take the connected pieces off the map as you could in the previous puzzles (the ones with the phrases). You're confined to the 9x9 grid. When experimenting with other pieces, you'll inevitably mess up the portions of the map that do fit together, and then you'll have to put those together all over again. That's what takes up the most time. After months of working this way, I made a screen dump of the map, printed it out, cut out the pieces, and assembled half the map. I then duplicated the pieces on TFE's map, and was quickly (another couple hours or so--hey, it's quick, relative to the months spent working on it!) able to finish the rest.

Post–Sun's Map. Read, read, read the Fool's story. And then read it again. Did I mention you should read the Fool's story? In each chapter, write down any bold word, any capitalized word, any number, any scrambled letters, any instructions you come across. Use the map itself as an additional clue. Notice the giant letters in different fonts and colors. Notice the pairings of the small letters with numbers. The highlighted portions of the map are all there to help. Clues are used once and only once. You can then scratch off that chapter and never look at it again. The hardest puzzle is probably the Straight Path, but think: somewhere in the story, did someone give you a letter to start with? Somewhere else in the story, did someone give you an obscure directions? Maybe it applies here. Or maybe not.

WAACE AtariFest '91

The Junkyard Pussycat informs us that his friends at WAACE (Washington Area Atari Computer Enthusiasts) have decided to stage another edition of their festival for Atarians. The 1991 event will be held on 12 and 13 October at the Sheraton Reston Hotel. Room prices will be about the same as last year. Booth prices for vendors have not yet been determined, but are expected to be somewhat lower (chairs will be available free this time).

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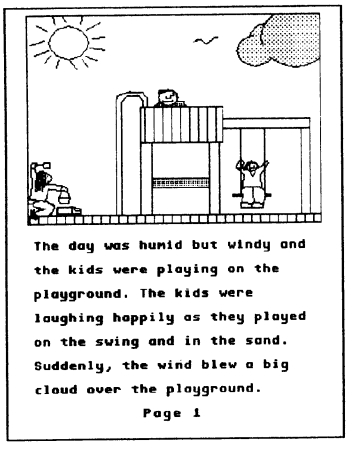

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Current Notes 1990 Index

Last year, 544 pages of news, articles, reviews, tutorials, and commentary appeared in the pages of *Current Notes*. Eleven percent of our text coverage dealt with the Atari 8-bit computer while 65% related to the ST/Mega series. The remaining articles, one quarter of the total, were machine independent. There were a lot of people who contributed to this publication. In 1990, 67 writers saw their articles published in CN. An additional 45 authors appeared in the "Letters to the Editor" section (not included in the index below). For your convenience, listed below, by type of article, is an index to everything published in 1990. Entries include the article title, author, month of publication and page number. Products reviewed in one of our regular columns are also listed under the product review section.

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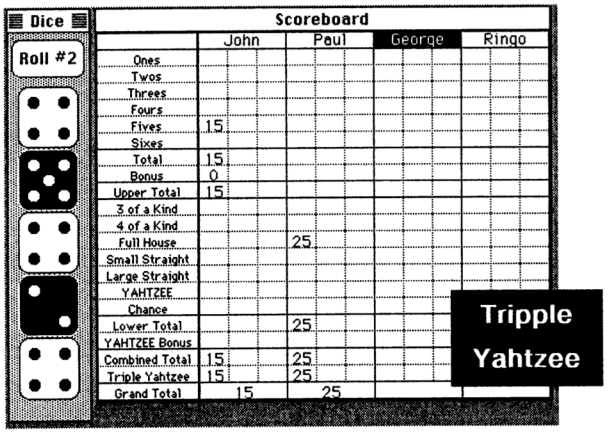
New Spectre CN Library Disks

by Jeff Greenblatt

This month, Current Notes is releasing five new PD and Shareware Spectre compatible library disks. Some of these applications will only work with version 3.0 of Spectre and are so noted. If you like and use these files, don't forget to make your shareware donation(s) to the author(s). Here is a rundown of what each of the new disks contain:

S101D: Games #14. Contains 8 new games (Spectre 3.0 required). They are Express Lane, Glider+ 2.02 with Docs, Glypha 2.0 with Docs, MiniGolf, pNuki 1.1, Slam Dunk 1.2, TENS!, and Tripple Yahtzee.

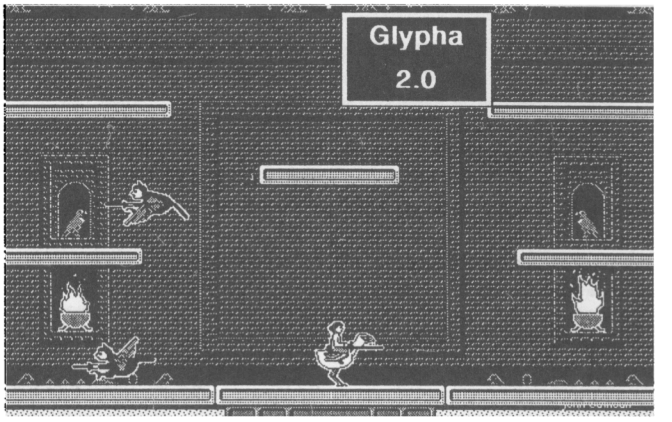


S102D: MouseDroppings Hints. Contains 47 text files with hundreds of hints and tips on the use of the Macintosh and many applications.

S103D: Chime 1.6. Contains the latest version of Chime (Spectre 3.0 required) related documentation and 27 chime sounds. The sounds are Better Cuckoo, Big Belch, Big Ben, Boing 3, Chime 15, Chime Bell, Curly, Donk, Flying Arrow, Guitar, Happy Baby, Hiccup, High Bell, Horn, IBM PC, Meep Meep, Nyuk Nyuk, Quack, Sam Kinnison, Sheep, Shotgun Blast, Spam?, Standard Radio Boing, Synth Clock, Toot Toot, Twit! and Windup Alarm.

S104D: Intruder II. An adventure game created with World Builder. It took the author two years to create this shareware adventure. It may take two years to solve it.

S105: ATM Fonts #1. Seven Type 1 Postscript fonts for use with Adobe Type Manager 1.2 or higher. The fonts are Carrick Caps, Green Caps, Horst Caps, Konanur Caps, Lee Caps, Reynolds Caps, and Zaleski Caps.



Other CN Spectre Library Disks

S100: Stuffit Classic 1.6
S99D: Utilities No. 16
S98D HyperStacks No. 11
S97D: Games #13
S96D: PublishIt Easy Demo
S95: Startup Screens No. 2
S94: Sounds No. 9
S93D: Games No.12
S92D: EPS Clip Art No.3
S91D: Utilities No.15
S90D: Games No.11
S89: HyperStacks No.10
S88D: EPS Clip Art No.4
S87: Utilities No. 14
S86D: Twilight Vale Adv. Game
S85D: EPS Clip Art No. 3
S84: Sounds No.8
S83: Utilities No.13
S82D: HyperStacks No.9
S81D: Grendel 1.0 Adv. Game
S80: Postscript Fonts No.4
S79: Utility No.2
S78: EPS Clip Art No.2
S77: Graphics No.3
S76: StartUp Screens No.1
S75:: Games No.10
S74: Sounds No.7
S73: Utilities No.11
S72D: HyperStacks No.8
S71D: Shanghai Demo
S70D: HyperStacks #7
S69: Sounds No.6
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S66: Games No.8
S65D: HyperStacks No.6
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S63: Utilities No.9
S62D: PipeDream Demo
S61D: HyperStacks No.5
S60D: PostScript Fonts No.3
S59: Sounds No.5
S58D: Clip Art No.2
S57: Utility No.8
S56D: HyperStacks No.4
S55: Utility No.7
S54: Games No.7
S53D: Clip Art No.1
S52: Postscript Fonts No.2
S51D: Postscript fonts No.1
S50: Dungeons of DoGm, V5.4
S49: Lawn Zapper arcade Game
S47D: Phoenix Adv Game, disk I
S48D: Phoenix Adv Game, disk II
S46: Everyman 1 Adv. Game
S45: Graphics No.2
S44: Utility No.6
S43 VideoWorks w/Sound No.2
S42: Productivity No.2
S41: Productivity No.1
S40D: HyperUtility No.3
S39: Utility No.5
S38: Games No.6
S37D: HyperStacks No.4
S36: Sounds No.4
S35D: HyperStacks No.3
S34: Excel Templates
S33D: HyperUtility No.2
S32: VideoWorks w/Sound No.1
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S29: Sounds No.3
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S21: Utility No.3
S20D: MacDraw II Demo
S19D: Hyper Utility No.1
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S17: Sounds No.1
S16: DAs No.1
S15: Games No.3
S14: Utility No.2
S13D: Stacks No.2
S12D: Full Impact Demo
S11: Utility No.1
S10: HyperStacks No.1
S09: Telecom No.1
S08: Image Studio Demo
S07: Games No.2
S06D: Powerpoint Demo
S05: Games No.1
S04D: Aldus Freehand Demo
S03D: Red Ryder 9.4
S02: MacPaint 2.0 Demo
S01: MacWrite 5.0 Demo

(All CN disks are $4.00. See page 77 for ordering information.)

Current Notes ST Library

July–August 1990

#460D: DYNACADD DEMO–(M) V1.76. CADD package, (no SAVE or EXPORT) comes with font editor program and several utilities. Req 1MB, DS, mono.

#461: CALAMUS OUTLINE ART DEMO--(M) Working demo (no SAVE) to this companion program to Calamus. Req 1MB, DS, mono.

#462: BLOODWYCH DEMO–(C) Fully-playable "Dungeon Master" game by Mirrorsoft.

#463: BLOOD MONEY DEMO and WIPEOUT--(C) BLOOD MONEY, horizontally-scrolling shoot-'em up. WIPEOUT demo, Intergalactic Hoverboard Challenge.

#464: PERSONAL FINANCE–Payroll, (V3.0, complete payroll operations, quarterly reports, printing paychecks, up to 200 employees). Cost of Living Adjuster, Checkbook V1.14, and Personal Finance Manager demo.

#465D: MAIL PRO & STOCKS AND BONDS--(M) Mail Pro Demo: filing and mail-merge system, demo ver offers limited entries. Req 1MB. Stocks and Bonds is a game based on the fast action stock market game.

#466: 16-VOICE SEQUENCER--features multi-voice recording, split keyboards and/or velocity ranges, simple editing.

#467: MIDI MUSIC MAKER–music player for Music Studio 88, Music Construction Set, EZ-Track, Standard MIDI Files, Sid Player Music, Master Composer, Advanced Music System, MIDI Music System, Orchestra 85/90, Lyra1/2.

#468: CALAMUS FONTS#3–Advertising, Barnum, Casual, Celtic, Chrome, Flash, Harloe, Mouse, Schoolbook, Western. Incl Atari, MC & VISA logos.

#469: PAGESTREAM FONT EDITOR--The official font editor from Soft-Logik.

#470: CLIP ART#14--People, in variety of everyday situations–Degas format.

#471: CLIP ART#15--More People in Degas format pics. DSLIDE viewing program included.

#472: INSTANT GRAPHICS! V2.14--communicate over modem in color, sound, and motion.

#473: INSTANT GRAPHICS! UTILITIES--editing and graphics creation utility, in-depth tutorial, and utility to convert Music Studio files to IG format for playing MIDI songs over your modem.

#474: MINITERM and MINIBBS--Miniterm is a full-featured desk acc. Minibbs is operational BBS with up/download, chat mode, and message bases.

#475: HYPERSCREEN and STDCAT V4.3--Hyperscreen, implimentation of the Hypertext concept on the ST. STDCAT, disk cataloger program.

#476: ME FIRST--(C) V2.0. Interactive learning games/stories for children. Includes documentation and additional DATA files.

#477: CLASS and EZ-GRADE--CLASS V2.05, combination database and spreadsheet for teachers. EZ-Grade, demo of a commercial gradebook program from Integral Software.

#478: SPACEWARS--(C) Version 1.0, new outer space shoot-em up game.

#479: HERO IID--DEMO of HERO II gaming system incl Dungeon Construction Set to create and manipulate dungeons for the HERO II game system.

September 1990

#480D: CURRENT NOTES CATALOG--catalog of the 500+ disks in the CN ST Library.

#481D: CN MACINTOSH COLLECTION--complete text of the Magic Sac/Spectre columns published in CN from 3/87 - 7/90.

#482D: WALLACE NO.1--Cyber Animations: Dr.Who and Who-K9. 6 NEO pics (cigs, daleck, floppy, paper, whobox4, whobox5)

#483D: WALLACE NO.2--Cyber Animation: Albatros. 6 NEO pics(alarm, diner, kitten, marquee, ssmonu, title2). 5 PI1 pics(chocolat, express, house, shawl, unionst1).

#484D: WALLACE NO.3--Cyber Animations: Mad_Max and Megafugi. Marsch.spc, animate4.prg, and spslide.prg.

#485: ALGEBRA I: Linear Equations--tutorial program leading the user into correct equation solving techniques from basic properties through fractional equation solving.

#486: ALGEBRA I: Verbal Problems--Covers 10 of the most common type verbal problems found in Albebra I textbooks.

#487: BASIC MATH SKILLS: Operations--pick adding, subtracting, multiplying, dividing, or a mixture of all four. Includes choice of one of two different arcade type learning games.

#488: GIST (Grades, Interims, Student Teams)--grades management program for teachers.

#489: DO NOT STAMP UTILITIES--Area Code Locator; Postal.prg, state abbreviations and spellings; SHREDR V1.1, permanently shred data from your disk; Hot!Stat V1.1, analyze ledger files created by HotWire.

#490: THE VIRUS DISK--The Virus Killer, Ver 3.11, detect and eliminate viruses from your disks; Hospital, set of anti-virus utilities; Super Virus Killer; Flu, displays symptoms of viral infections.

#491: WILD FLOWERS--16 stunning pictures of Wisconsin wild flowers in PC1 format (Blackeye, Bloodrt, Fleabane, Forgetme, Goldnrod, Hawkweed, Hepatica, Indpipe, Paintbru, Prklypar, Silverwd, Smallow, Spiderwt, Thistle, Trillium, and Wildrose).

#492: UTILITY NO.44--Fast-Copy III! (program and accessory); HyperFormat, format 927K on 83-track DS disk. ARC Ver 6.02, latest version of ARC compression utility, runs roughly twice as fast as earlier Ver 5.21.

#493D: B/STAT--Version 2.36 of B/STAT, sophisticated graphing and statistical analysis program. Req 1 MB, DS.

#494: TAIPAN II/GFA SHELL PLUS--Taipan II, V1.1: early 1800s trade as you engage in combat with enemy ships.(C) GFA Shell Plus: replacement for the GFA Menux program.

October 1990

#495: TESTMASTER. Ver 2.01, (C/M) Set up your own tests to help prepare for exams. Data for a variety of general subjects (like States and Capitals) included.

#496D: GUITARIST DEMO. A tool to help guitarists learn chords and scales in all keys and all positions of the fretboard.

#497D: PUBLIC PAINTER V0.1 (Mono) Latest version of this popular paint program from Germany. Inclues English docs.

#498D: EQUINOX SOUNDTRACKER Soundtracker (V2.5) Includes five songs: tar concert in air, dns, demons soundtrack, rsi rise up, and wild.

#499: STARBLADE DEMO. (C) Space-opera set in the 30th Century in the vastness of the Orion galaxy.

#500: YOLANDA and RICK DANGEROUS. (C) Demos. Yolanda is an arcade/adventure game. Rick Dangerous, part-time explorer and stamp collector, captured by the Goolu tribe, must escape.

#501: PHOTON STORM.(C) Playable demo version of this fast-paced space arcade game.

#502: GLOVES/FUTURE(C) Playable demo versions of two new arcade games: Kid Gloves and Back to the Future.

#503: NEODESK 3 AND CLI DEMOs. Demo version of NeoDesk 3, a replacement for the built-in Atari desktop. NeoDesk CLI is a window-based command line interpreter that hooks into NeoDesk itself.

#504: KID GAMES.(C) KV_MATCH, Flip over squares to match baby and parent animals. LET-HUNT, learn alphabet by matching letters on the screen. ENCH_FOR, Enchanged Forest, a variant of both 'Shutes and Ladders' and 'Candyland' suitable for children 3 and above. KV_GEO-1, Hypertext geography, learn about the solar system. Shareware.

#505D: TALESPIN ADVENTURES.(C) SDI, Mansion, and Mountain. SDI.TAL (created by 10 children in the 2nd-5th grades), MOUNTAIN.TAL was designed by 8 3rd-5th graders.

#506: UTILITY NO. 45. TLC-Play, play any digitized sound fmt file; TLC-namr, add symbols to file name; tlc-form, format disk to read/write fast; TLC-attr, change file attributes; mouse_db, new mouse doubler V3; spirited, text ed desk acc; a1-time, time & date setter; clock_5, all rez clock acc; maccel3, Atari Mouse Accelerator 3; ocultarx, hard disk password protection; idle_22, idle screen saver;unlzh172, fastest extract for LZH archives; volume, rename disk volume; ST Sentry V5.1.

#507: TADS. Text Adventure Development System. Includes Ditch Day Drifter adventure game.

#508: DEEP SPACE DRIFTER. A Text adventure game created with TADS.

#509D: GENIE FILES 9/90. Archive of files found in the 31 GEnie libraries as of Sep 1, 1990. Files also listed in numerical order from 10000 through 16500.

November 1990

#510D: BULLETIN BOARD SYSTEMS. Two shareware bulletin board systems: Nite Lite BBS and Vulcan Embassy BBS.

#511: MIDI MUSIC DISK. Midi-Mike Version 1.0, Music Studio Song Player 1.2, and MSPlayer by Walter Holding.

#512: SORRY & ST SQUARE. (C). Sorry is the same as the popular board game of the same name. ST Squares is based on the Hollywood Squares game show.

#513: DISENCHANTED. An interactive fantasy game.

#514: PILEUP V3.1. (C) latest version of this Tetris clone is compatible with TOS 1.4.

December 1990

#515D: STARTING BLOCK. A collection of columns by Richard Gunter directed at the novice just starting out with his computer. Also includes other CN tutorial articles including a series on hard drives.

#516: STARGATE V3.0. Look out of a spaceship and see the stars around your location.

#517D: ALADDIN. GEnie Atari ST Aladdin, an automatic communications tool designed to provide you with the most efficient use of the features and services of GEnie.

#518: UNION DEMO. One of the most spectacular demos for the ST showing off many of the animation and sound capabilities of the ST. (C)

#519D: PRINTER UTILITIES. AW-Print, a generic printer utility that let's you easily define the characteristics of any printer and send codes via handy GEM drop-down menus. Also includes two 24-pin printer screen dump utilities (SCDMP1_5 and SCRDMP24), and specific printer setup utilities for the Panasonic KX-P1091i (PANASET), the STAR NB 24-10, (STARNB24), and Gemini 10x (GEMINI). Most of these will also work with any Epson compatible printer.

#520D: AIR WARRIOR, V2.0B. Latest update to this air simulation game. Game can be played in isolation to practice, but is designed for interactive combat on GEnie.

#521D: CLIP ART NO. 16. "Old Cars," 28 IMG files of a variety of antique cars.

#522D: CLIP ART NO. 17. "Cartoons," 55 IMG files. 10 pictures of Garfield, 13 Smurf pics, and 32 other cartoon characters.

#523D: CLIP ART NO. 18. "Misc Themes," 49 IMG files: 6 Egyptian pictures, 29 Music pictures, and 14 Zodiac pics.

#524D: CLIP ART NO. 19. "High Res Pictures," a collection of 24 fine art pictures in an IMG clip-art format.

#525D: GRAN PRIX. An auto racing arcade game with dozens of various courses. (C).

#526D: eSTeem PILOT Demo (1.0). PILOT is the classic, educational authoring language, richly enhanced by GEM, for creating and using tutorials, computer-based instruction, and laser videodisc training. Works best on monochrome systems.

#527D: NAME THAT TUNE & ALCHIMIE. Alchimie Jr is a music sequencer for use with MIDI. Name That Tune is a fun little game that lets you match your skills with an opponent to see who is better at recognizing songs. Use with either or both of the song data disks listed below.

#528: NAME THAT TUNE MISC SONGS. 111 songs for use with the "Name That Tune" game on #527. All kinds of songs are on this disk.

#529D: NAME THAT TUNE TV SONGS. 111 themes from various TV shows. Use with CN #527 for a fun and exciting Name That Tune contest.

#530: CINEMA & FLASHCARD. Two educational programs. Cinema allows young kids to run and create simple animation sequences. Flashcards is just like the name suggests. The author used it to help learn a foreign language.

#531: UTILITY NO. 46. Quick ST 2.2 Demo, speed up your ST! Little Green Selector V1.88--newest version of this alternative file selector routine. The Gram Slam Grammar Checker Demo--at last, a way to check your grammar!

#532: MANIAC MINER and VALGUS. (C) Maniac Miner lets you go exploring looking for underground treasures but watching out for rockslides and other obstacles. Valgus V2.0 is a two-player version of a Tetris-clone game. If you liked Tetris, you'll love competing against an opponent in Valgus.

February 1991

#533: ST GAMES. (C) COLLAPSE V1.1, Blocks fall in groups of three. The object is to line up three or more of the same type in horizontal, vertical or diagonal rows. JEOPARDY, Gives the players an excellent expierence in testing thier knowledge, and a simulation of being a contestant on the real show. VALGUS^2 V2.0 (pronounced "Valgus squared,") a the sequel to Valgus, a pd version of Tetris. In VSQ, the seven familiar Valgus pieces as back, but they come at you from all four sides of the 27x27 playing area. TRIPPLE YAHTZEE, V2.0, a terrific version of the popular dice game providing hours of enjoyment for one or more players.

534D: HACMAN II. (C) This Pacman clone has all digitized sound effects plus several new "features": 100 new levels, Four new ghosts, Cameo appearances by many other creatures, Puzzle boards, Skips (skip a board you hate by pressing the space bar), Ghost hit/miss statistics, Secret warps, and a surprise or two for the really devoted.

535: KIDMIXUP PLUS. (C) The "plus" is that you can now add your own sequence files created with any DEGAS-compatible paint program. Three picture files by the authors (a total of 27 sequence themes) are included with this program. Child chooses a sequence theme from the picture icons. Four pictures appear. The child clicks on each in turn to place them at the bottom of the screen in the correct order.

536D: FIVE KID PROGRAMS. (C) RABBIT (a rabbit bounces off the back of a fox in order to reach carrots floating by in the sky). SANTAWRK (Santa Claus is grasping for Christmas decorations while angels try to keep a trampoline under him). BURGER (Ronald McDonald attempts to grab burgers as they float by in the sky). CIRCUS: a two-player math game with adjustable level of challenge. ROBIN: control mother robin as she eats flies and gathers her children from various nests. These programs for kids 3 and up.

537: PERFECT MATCH and KV-FONIC. (C) Perfect Match, shareware version of program originally distributed by Michtron. Match cards to demonstrate your knowledge. KV_FONIC introduces children to phonics. It includes 9 pouzzles containing consonants (b,c,d...), blends (sl, sn, sm...) and digraphs (th,sh...). You can easily create your own puzzles or modify the existing ones.

#538: CALAMUS FONTS #4. Tiphany, Fancy Chancery, Windzor, University Roman and University Bold, Broadway Engraved, ST_FRANC (paste up your own ransom note), The Architect font, and SHOWFONT.CDK (produces a nice display of any Calamus compatible font.)

#539D: ARCADE DEMO DISK. (C) Playable demos of three arcade games: Toyota Rally, Flimbo's Quest, and Defender II.

The CN library is available on **Syquest 44MB** removable cartridges. Carts are $119.95 each plus $3 S&H.

Cart 1 has 112 ST disks (#347 - #469).

Cart 2 is the Spectre Collection (#S1-#S80).

You may also order Andrzej Wrotniak's programs through Current Notes:

STAR BASE, $43.

EL CAL 1.3, $44.

Both programs for $81.

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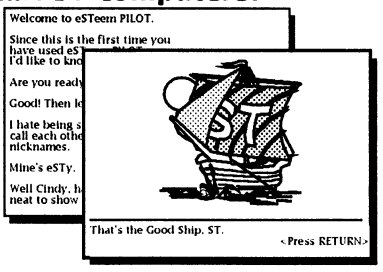

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